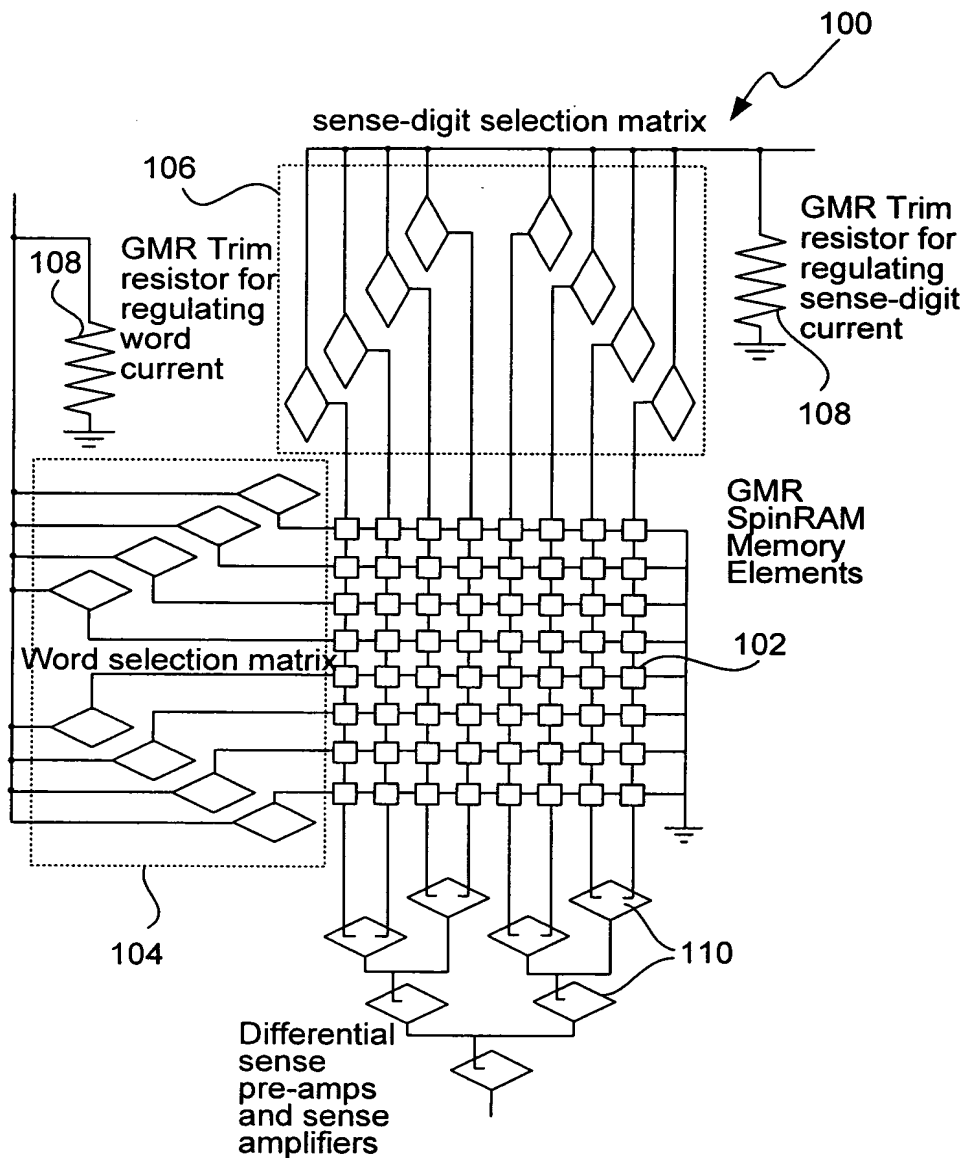
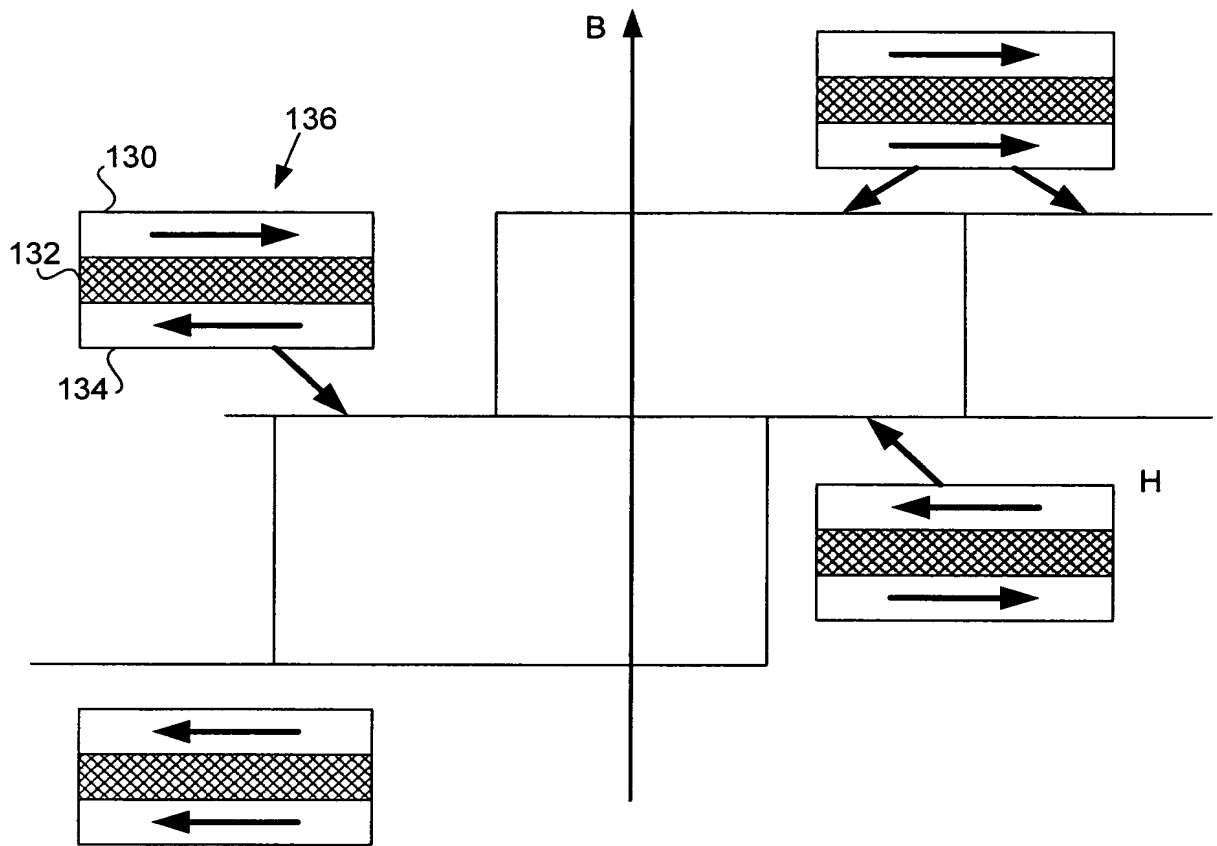


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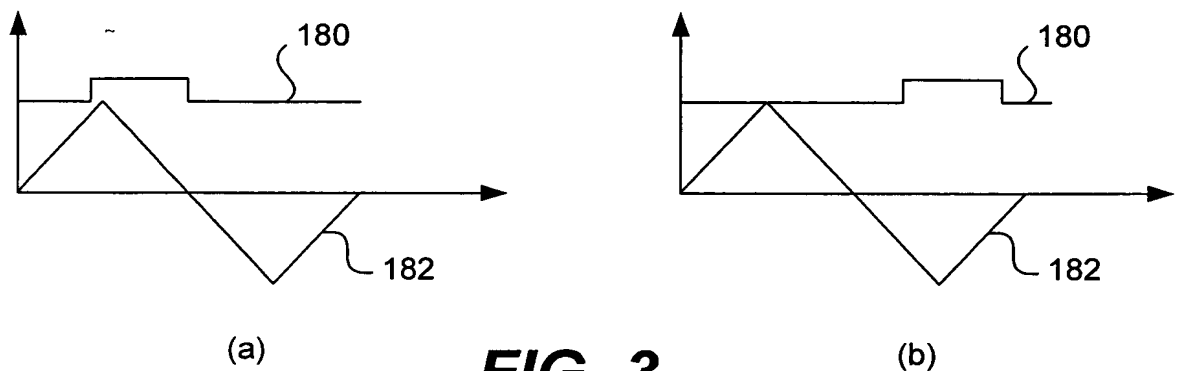


**FIG. 1**

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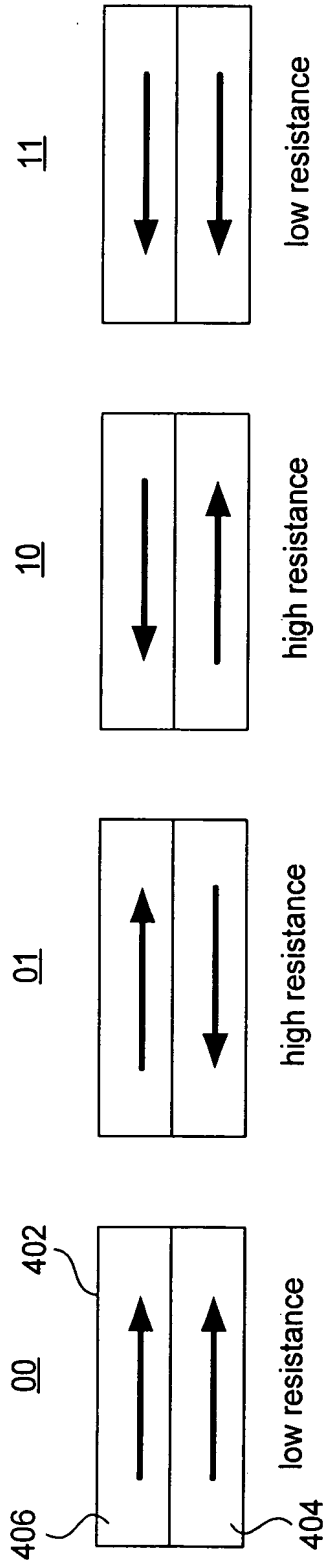


**FIG. 2**



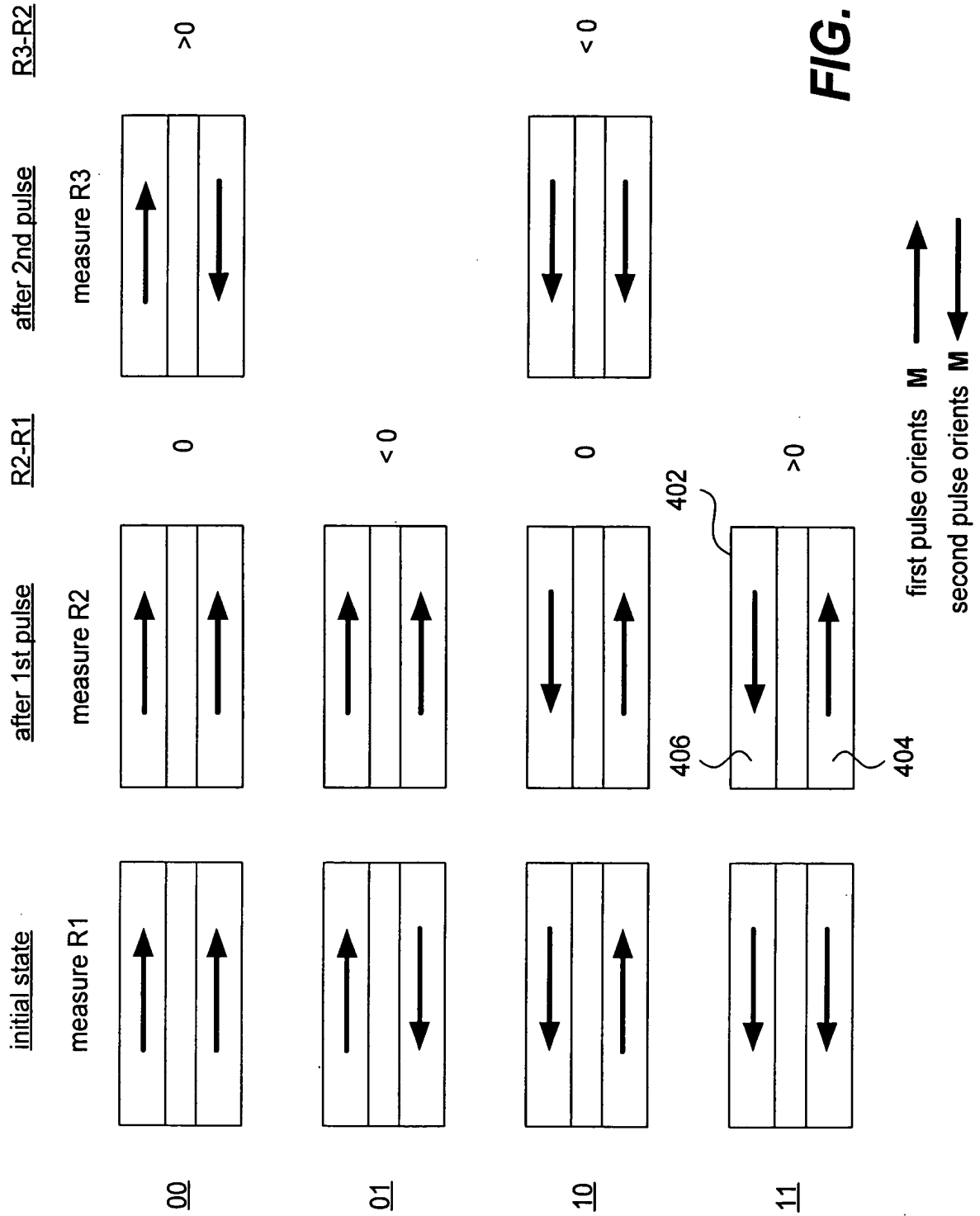
**FIG. 3**

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**FIG. 4**

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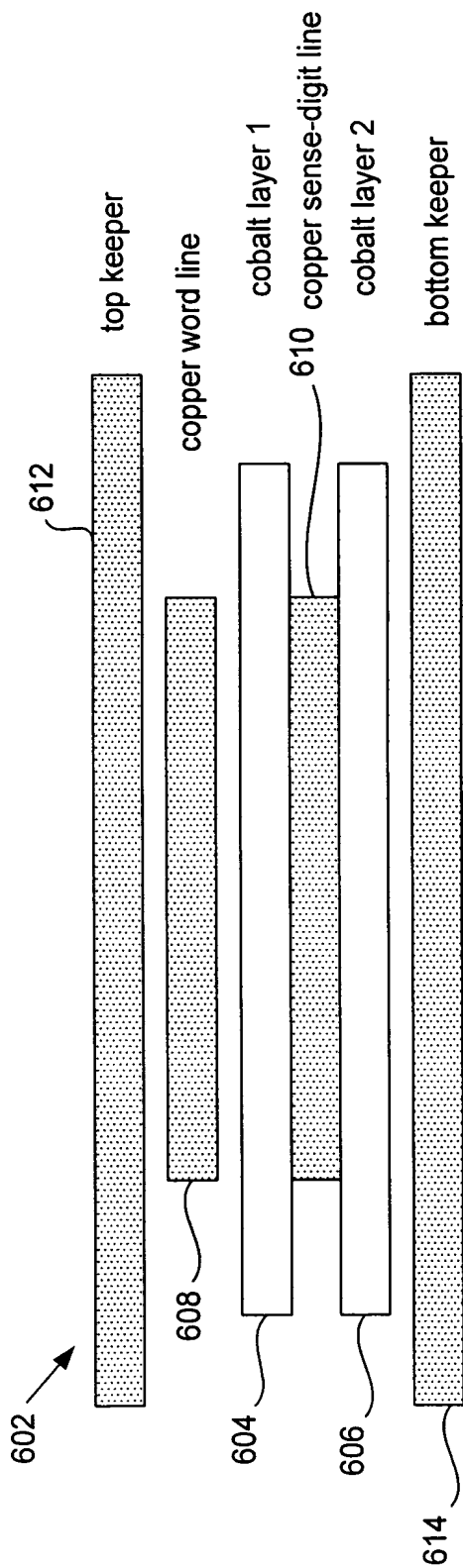


FIG. 6

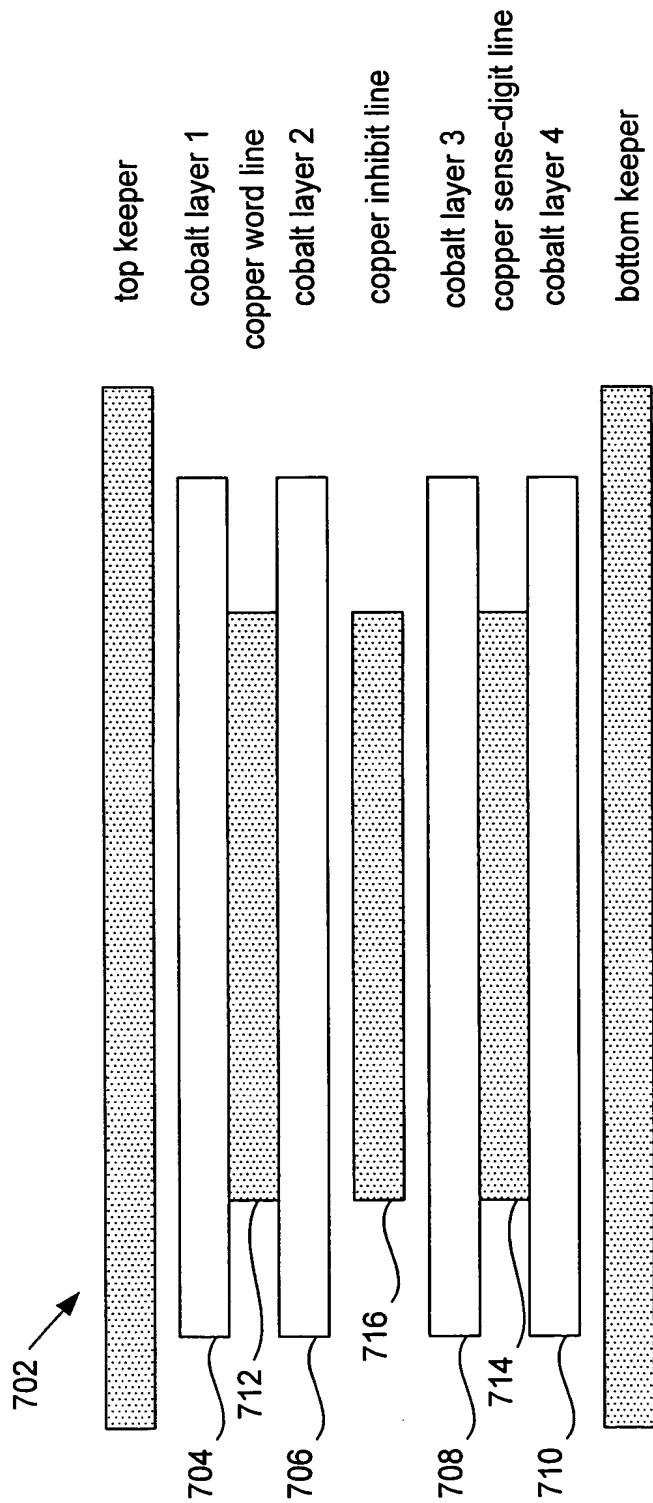
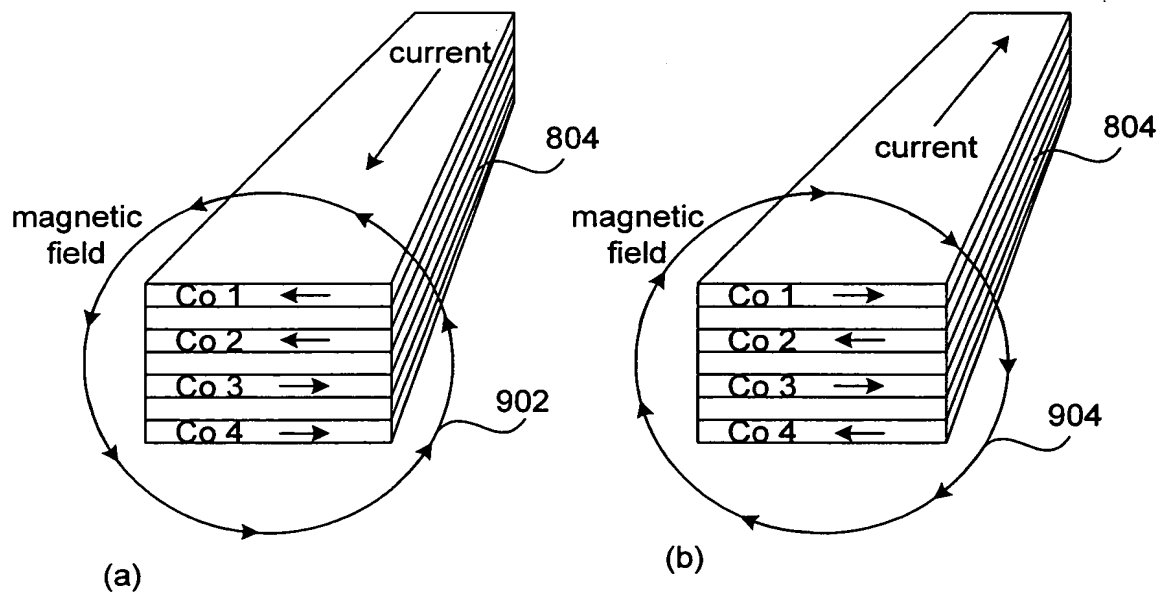
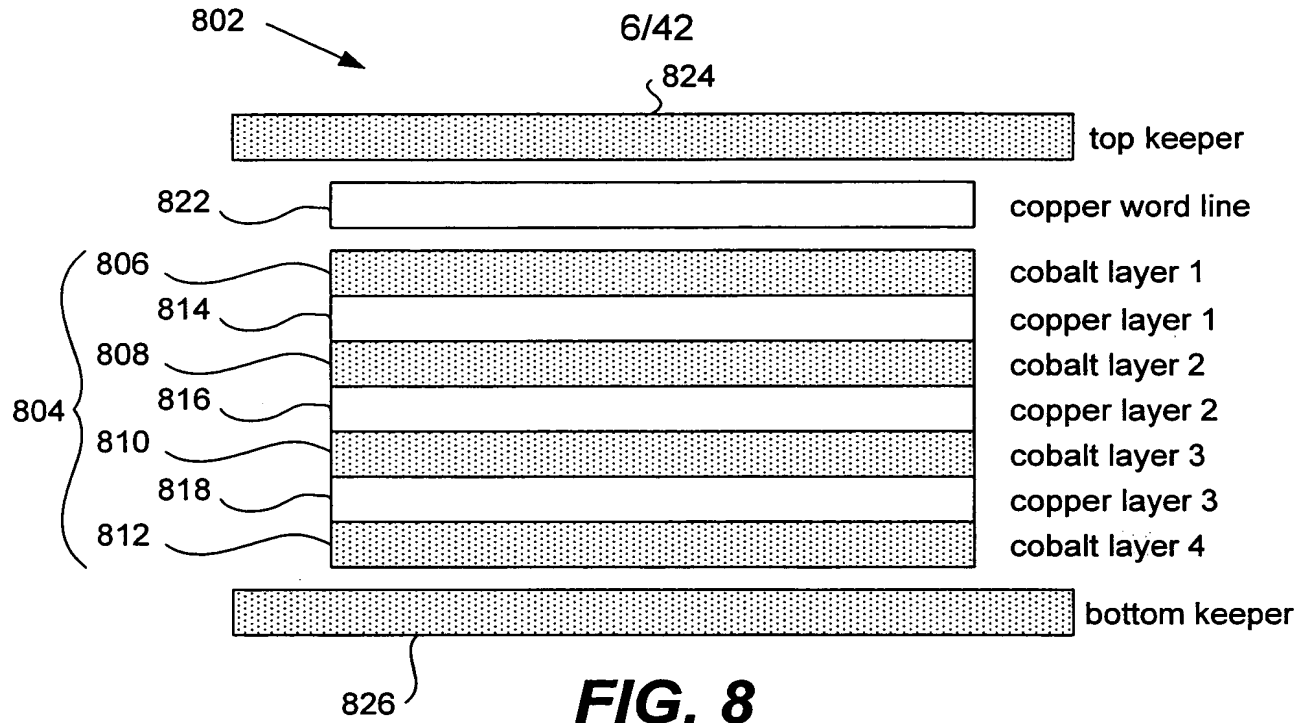
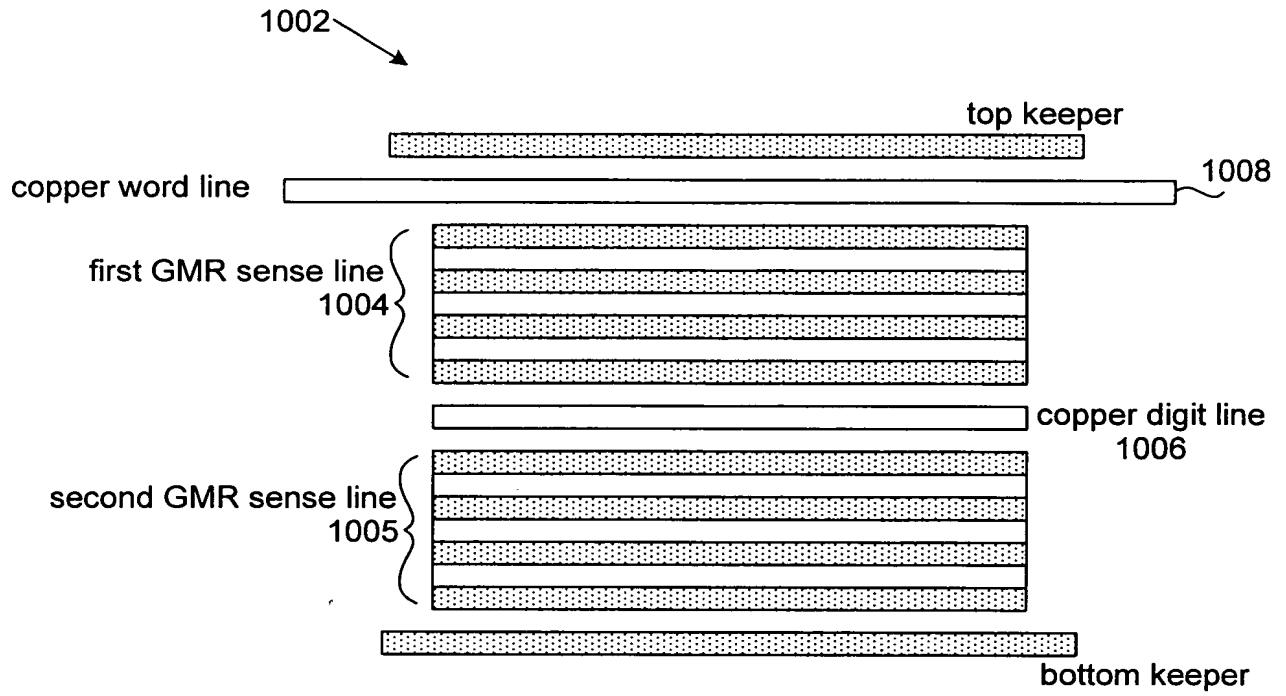


FIG. 7

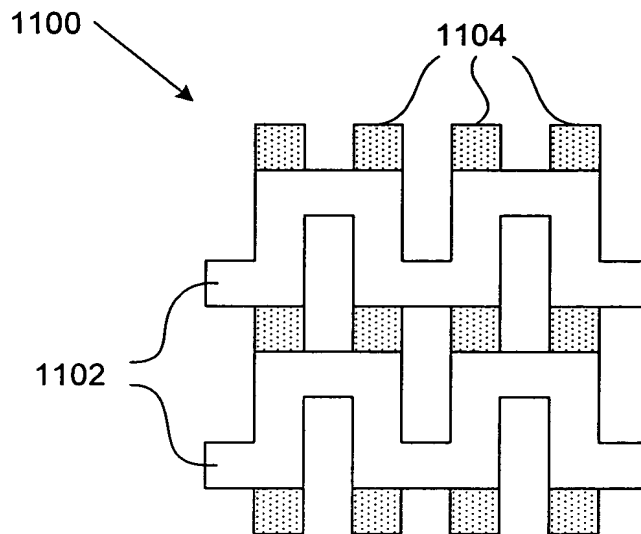


**FIG. 9**

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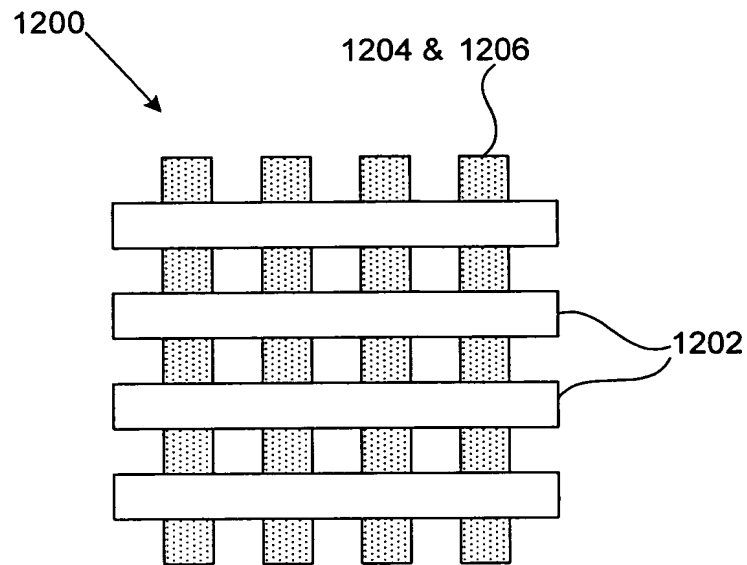


**FIG. 10**

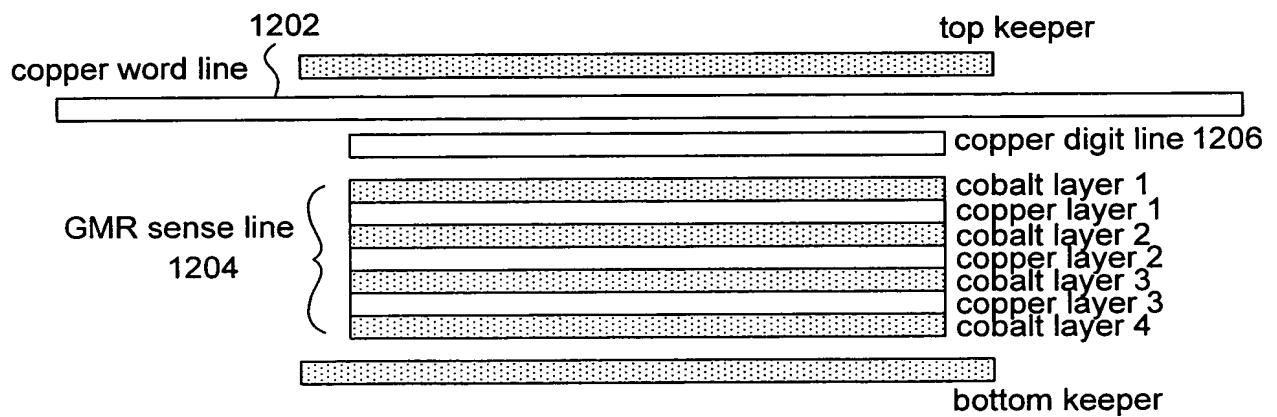


**FIG. 11**

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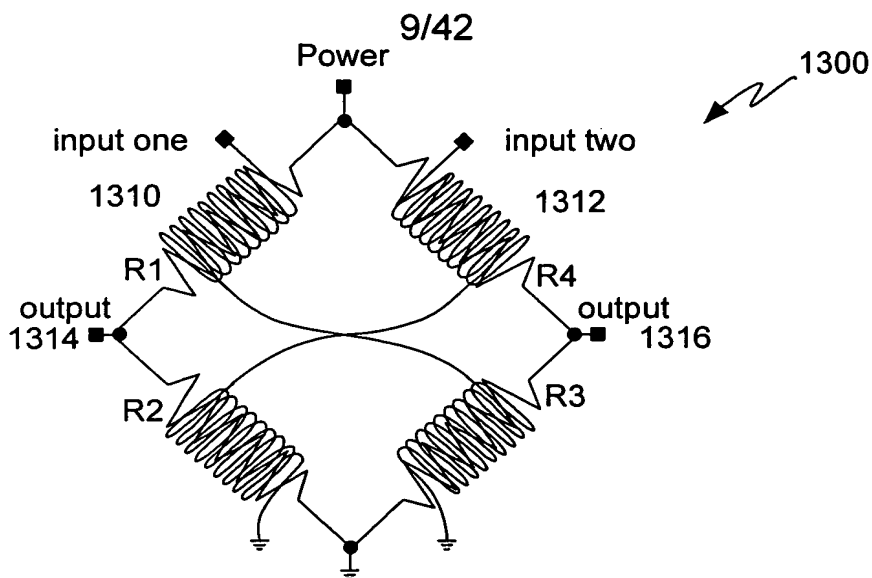


**FIG. 12a**

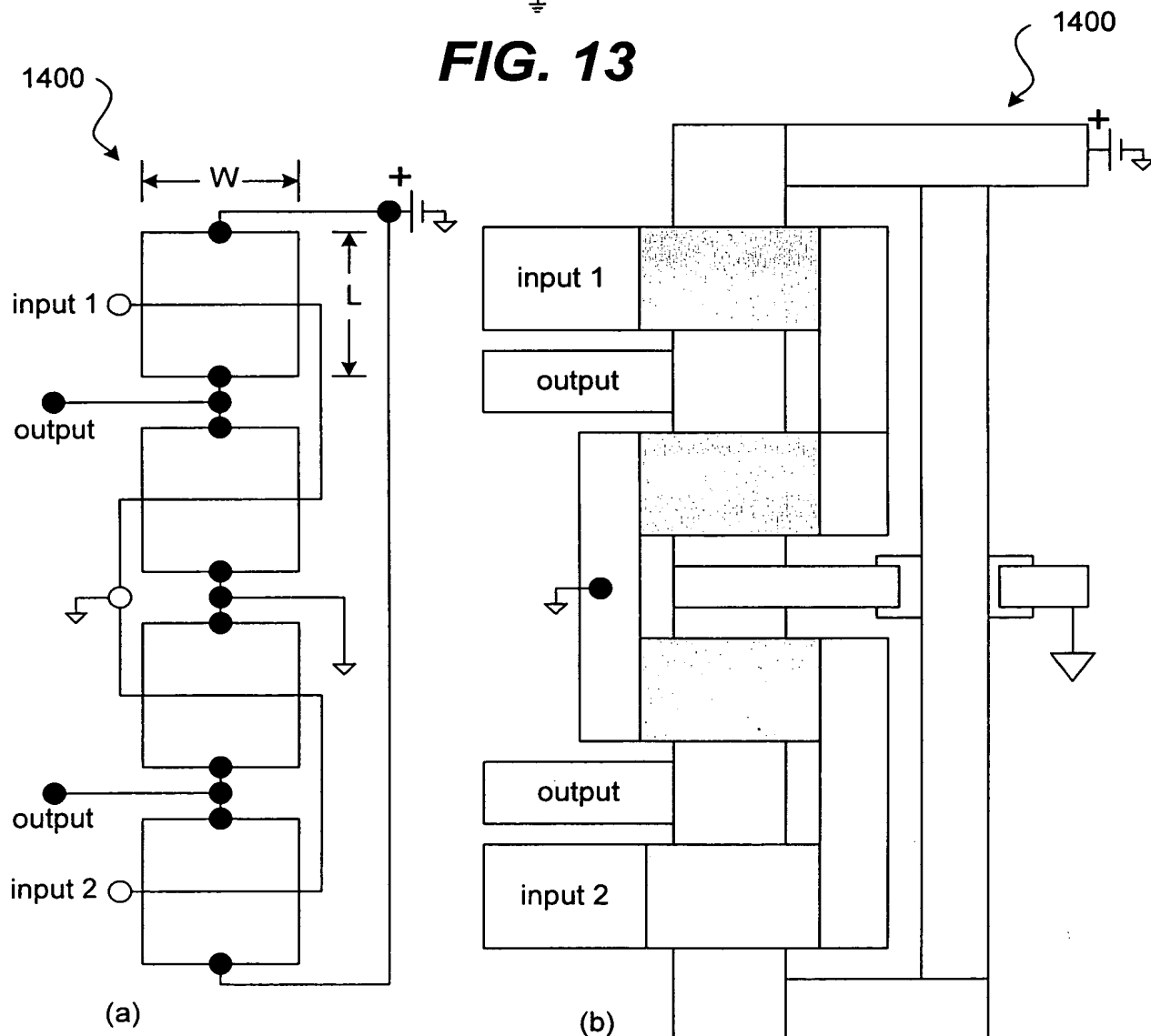


**FIG. 12b**



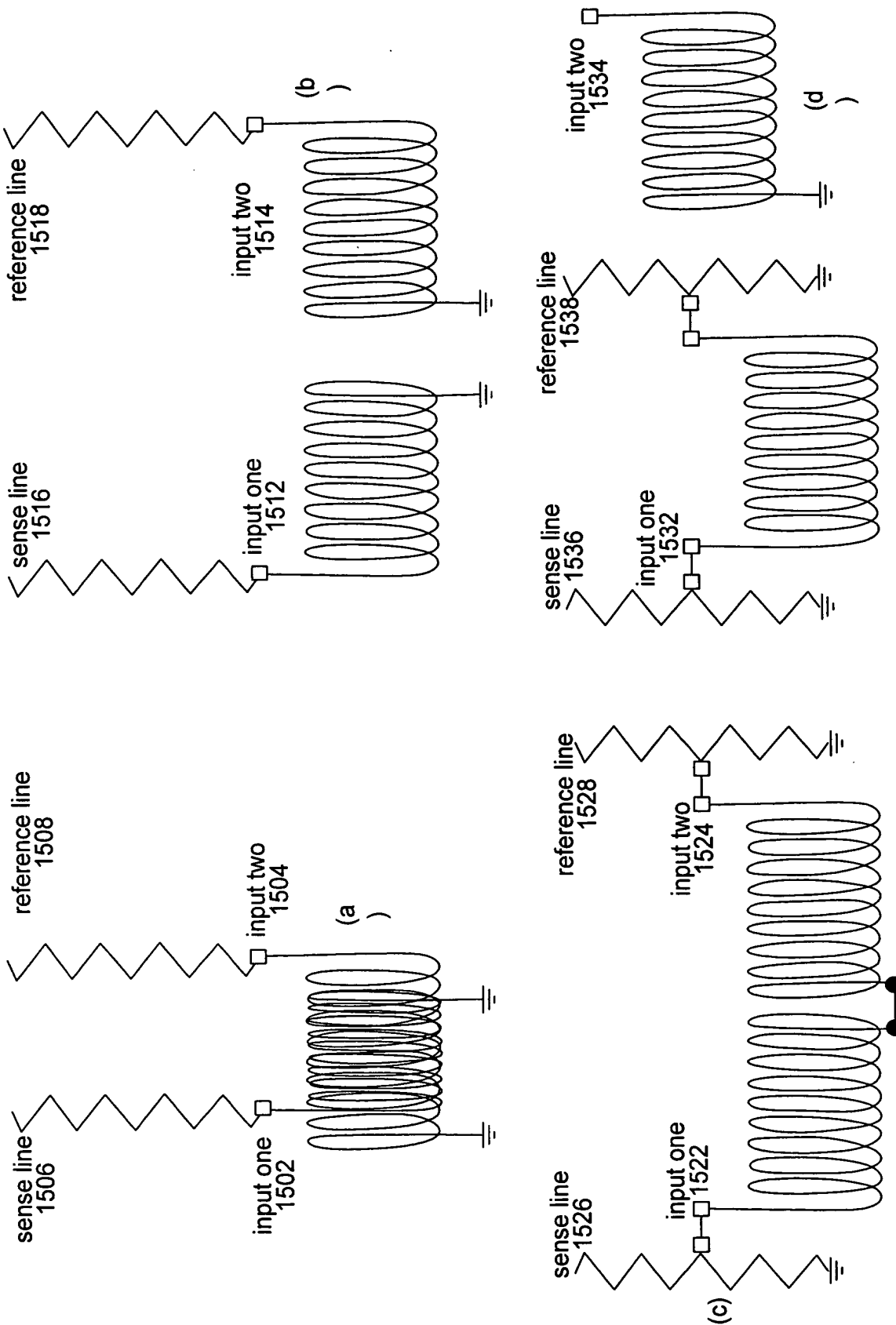


**FIG. 13**



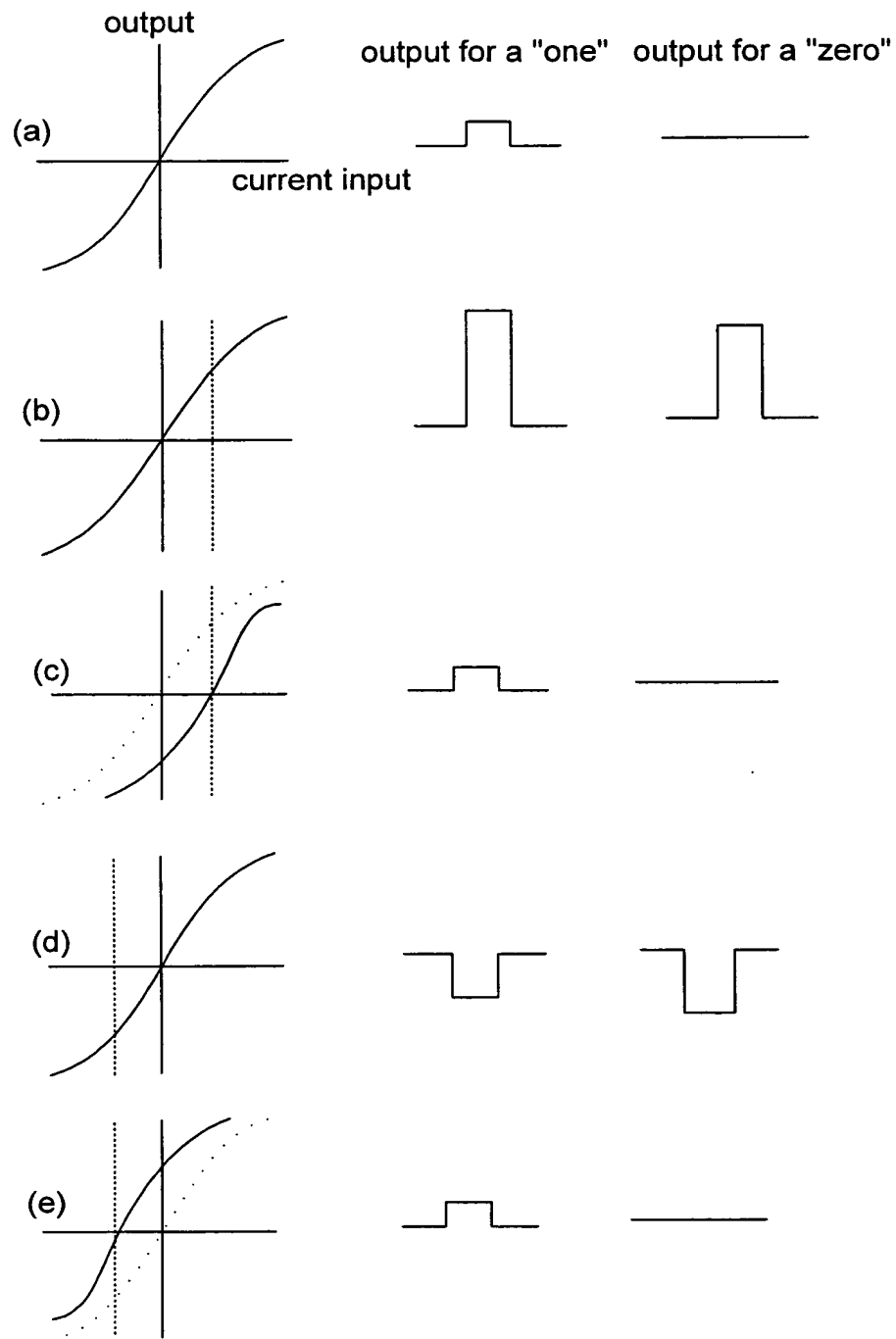
**FIG. 14**

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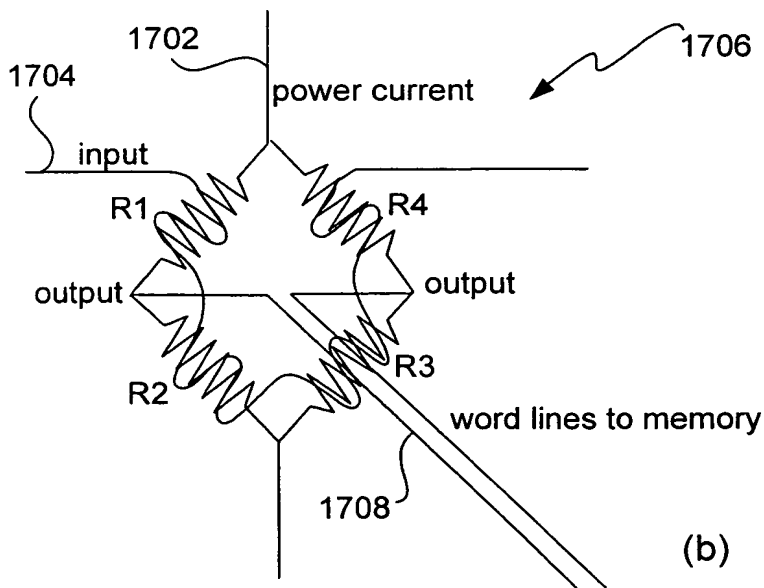
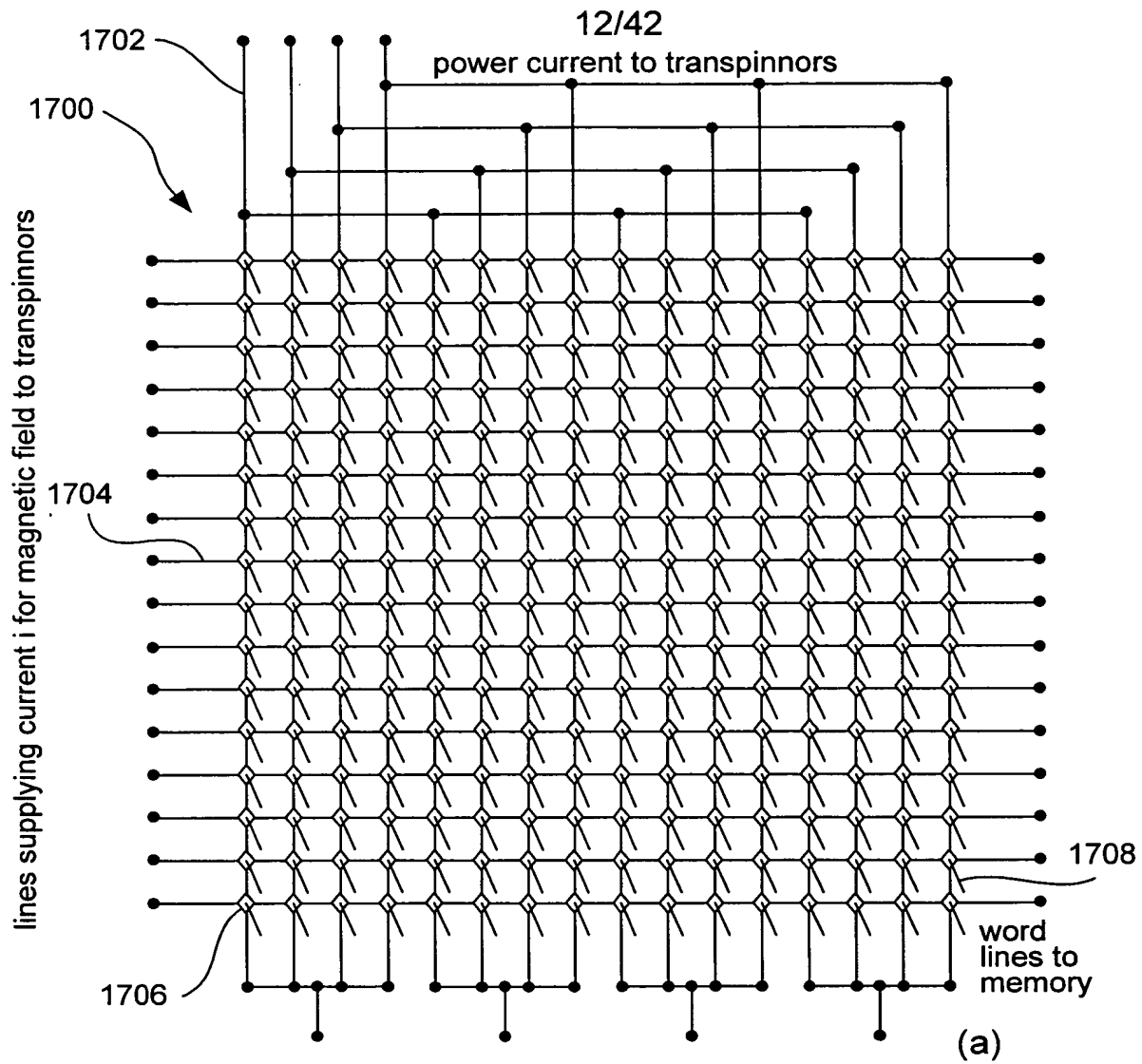


**FIG. 15**

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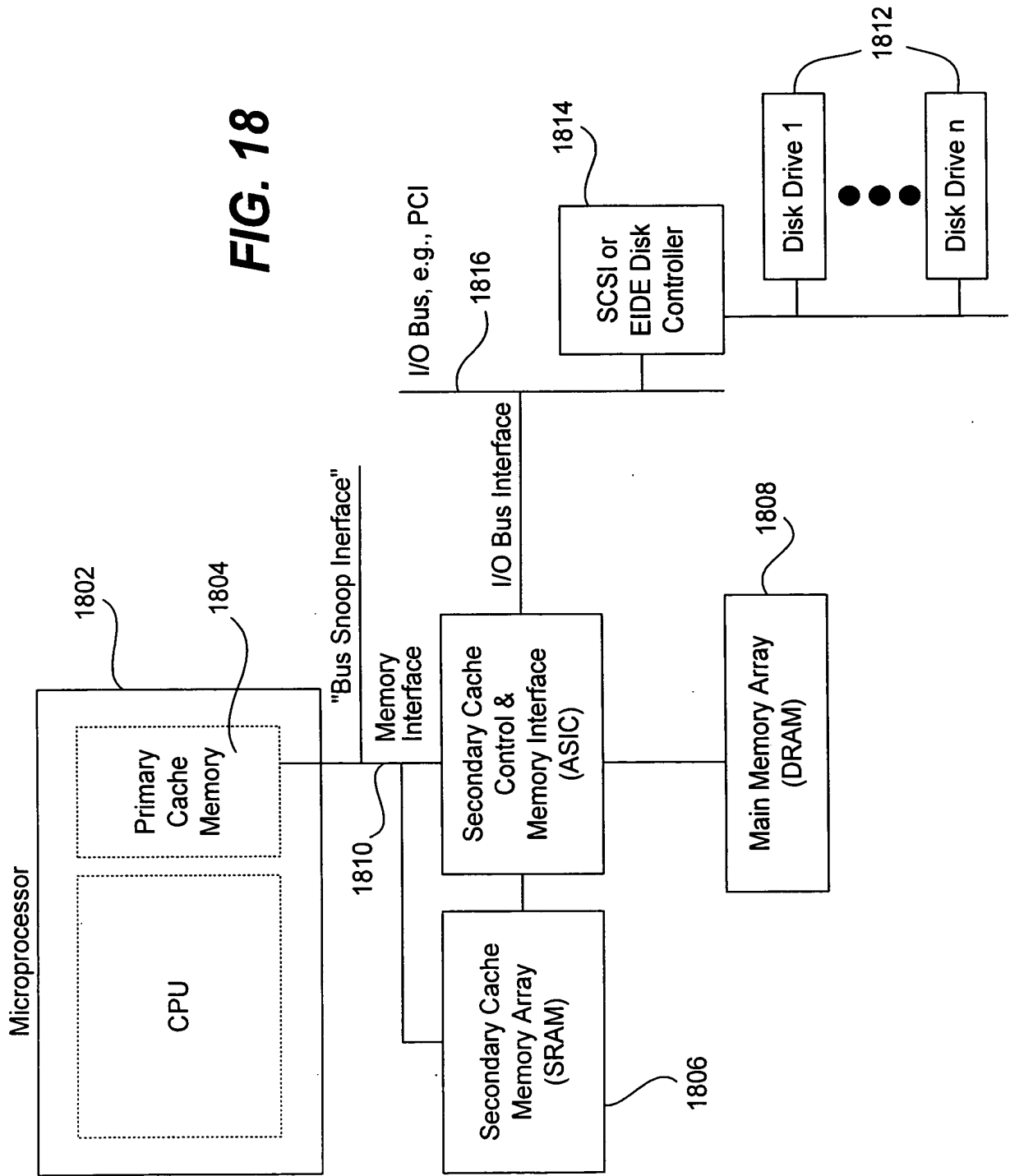


**FIG. 16**

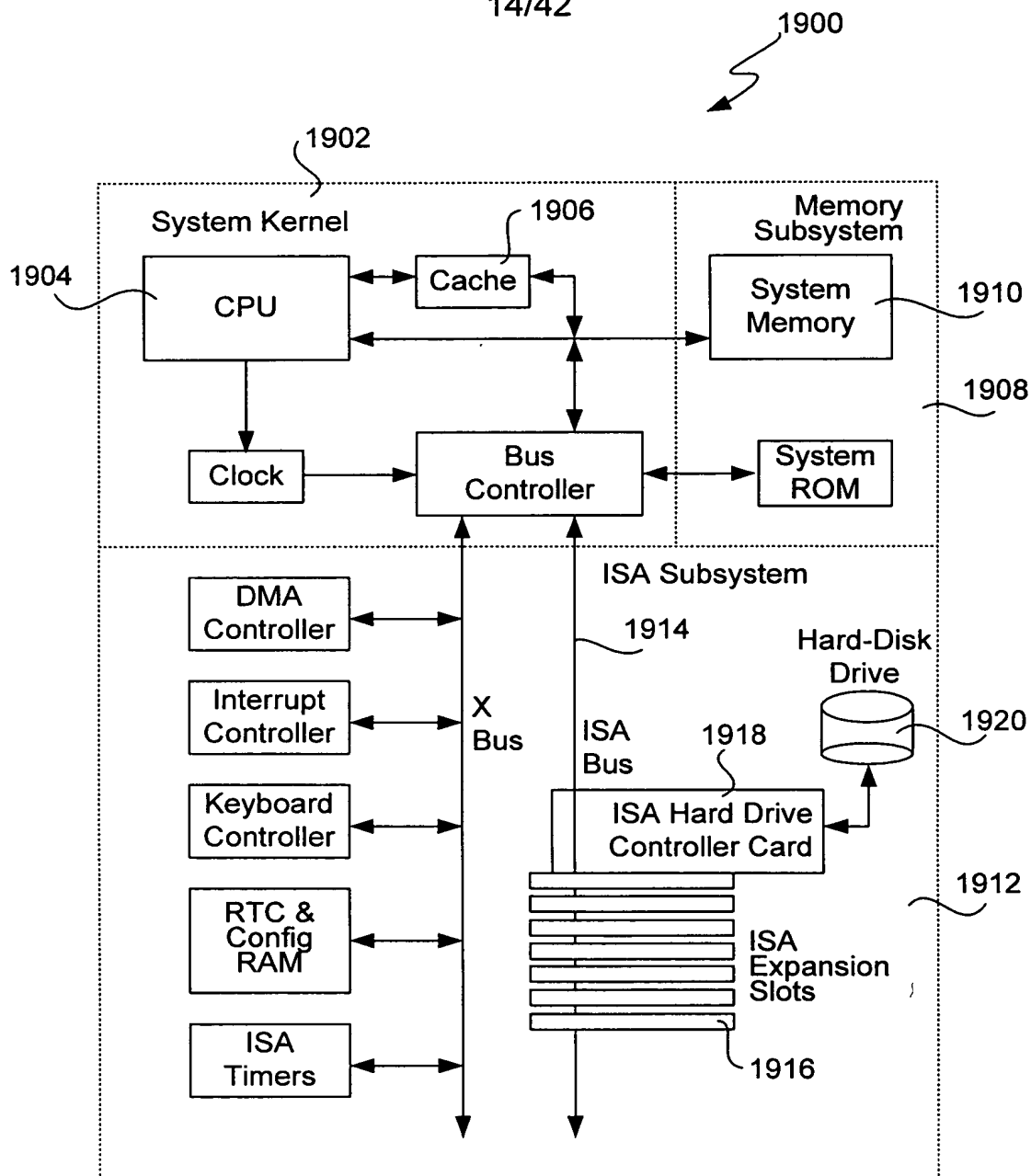


**FIG. 17**

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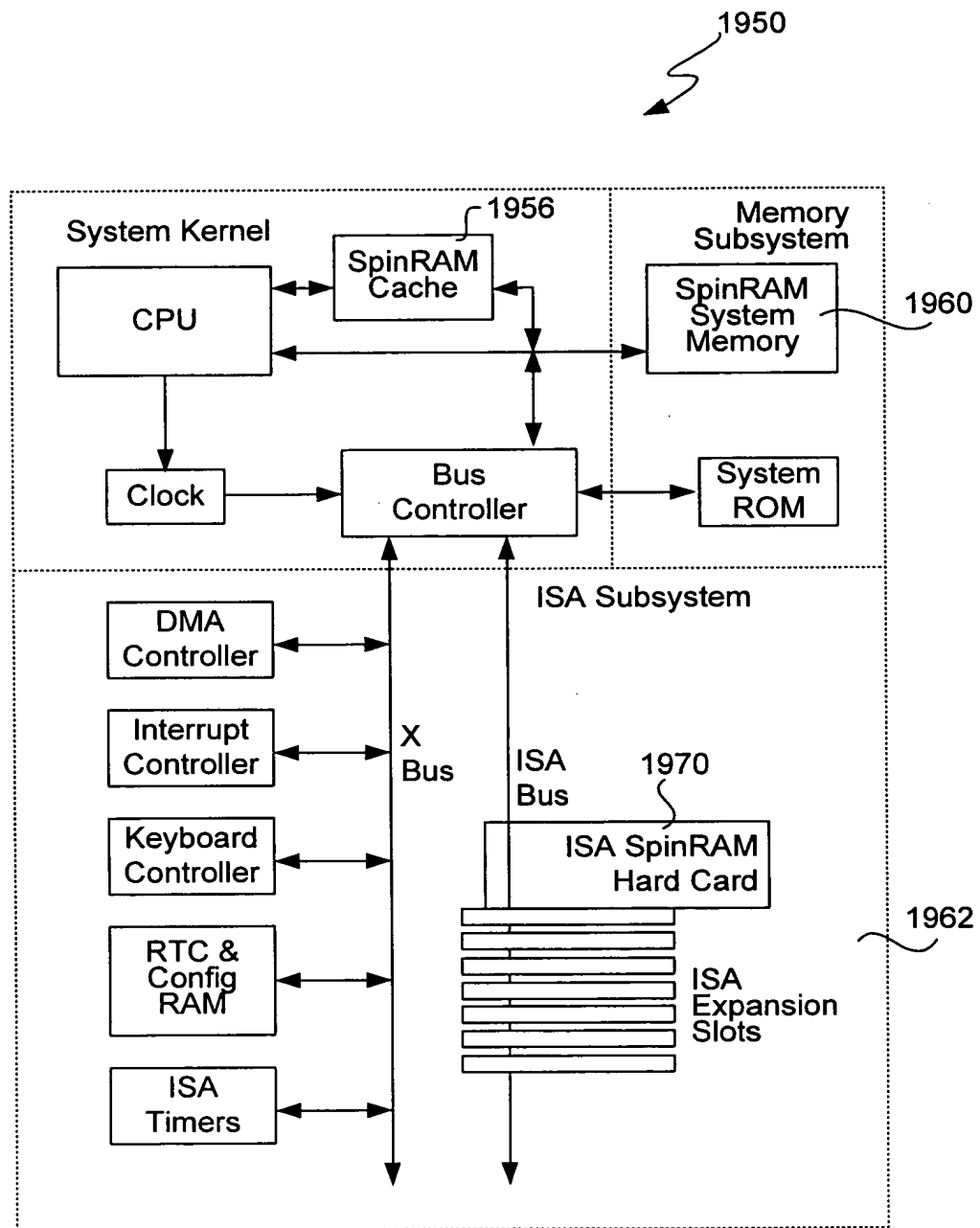


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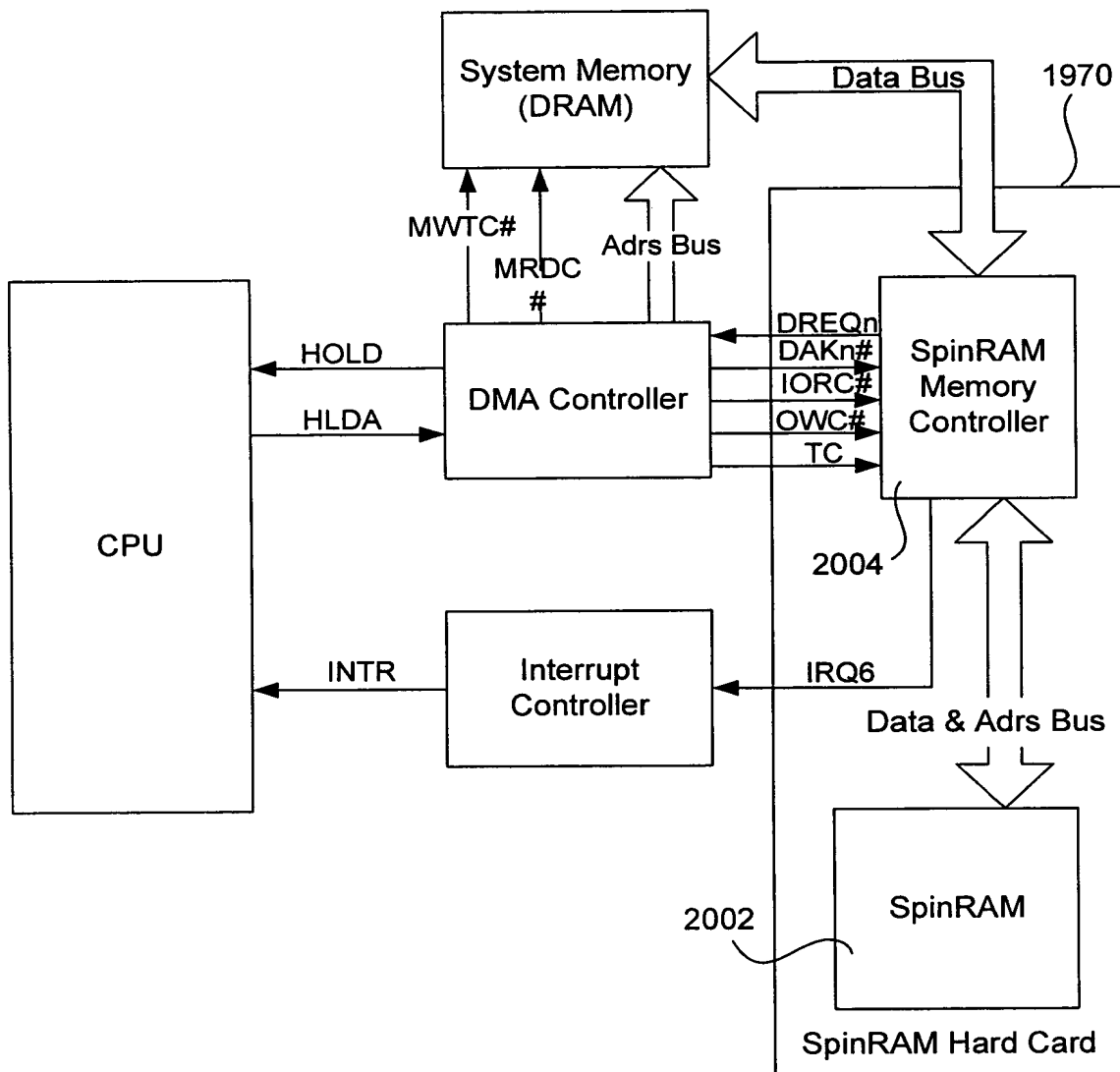
**FIG. 19a**

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**FIG. 19b**

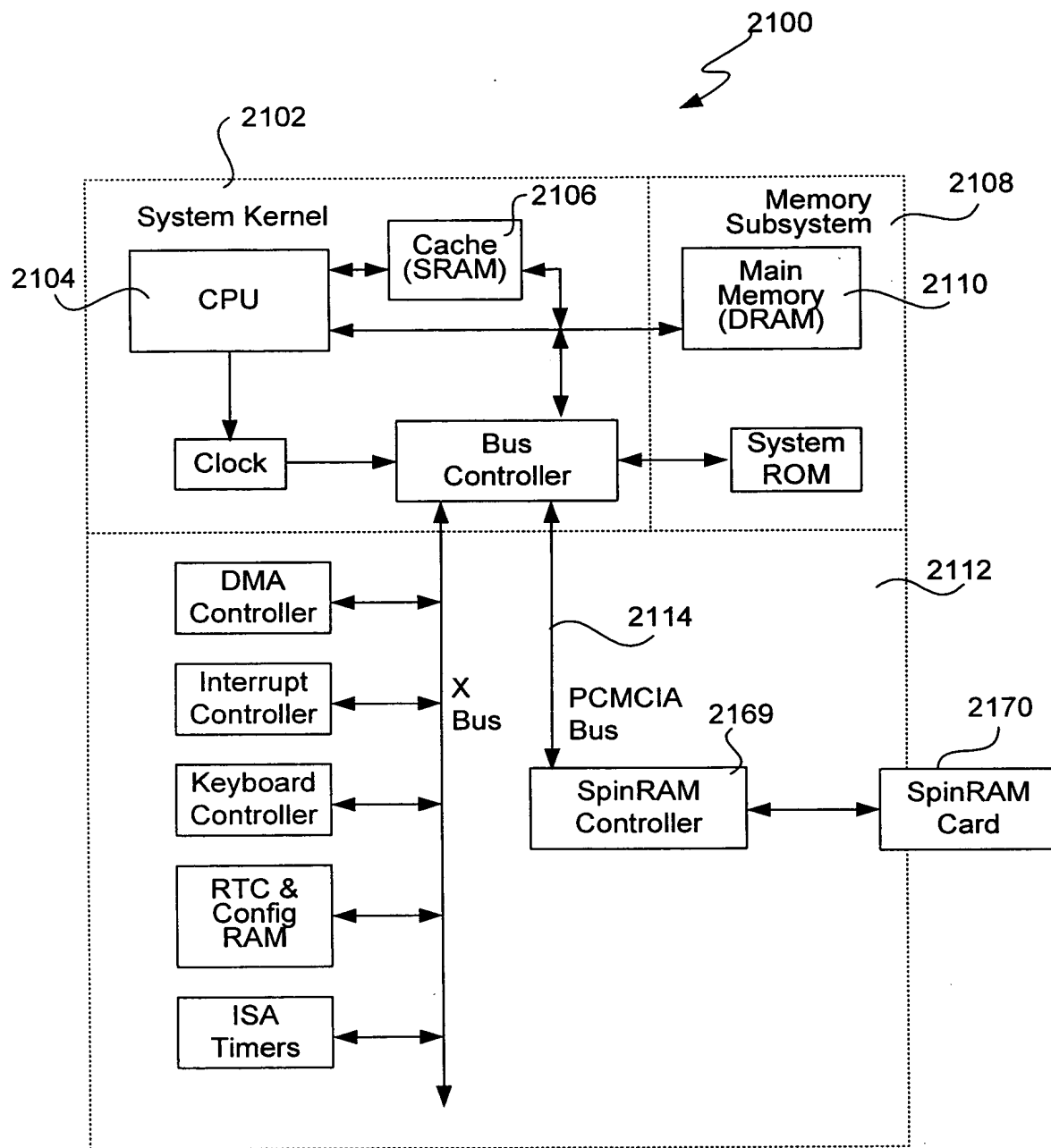
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**FIG. 20**



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**FIG. 21**

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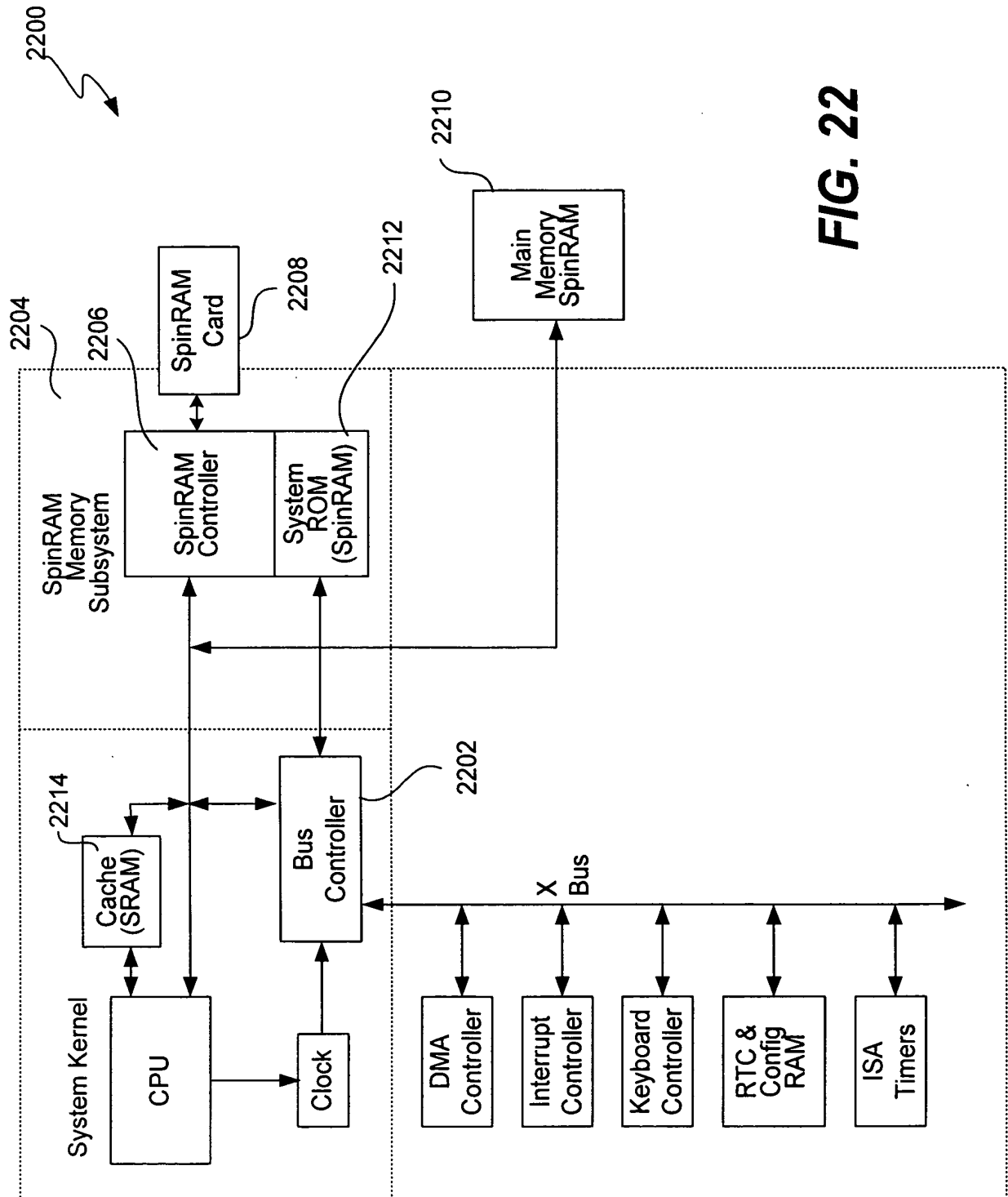
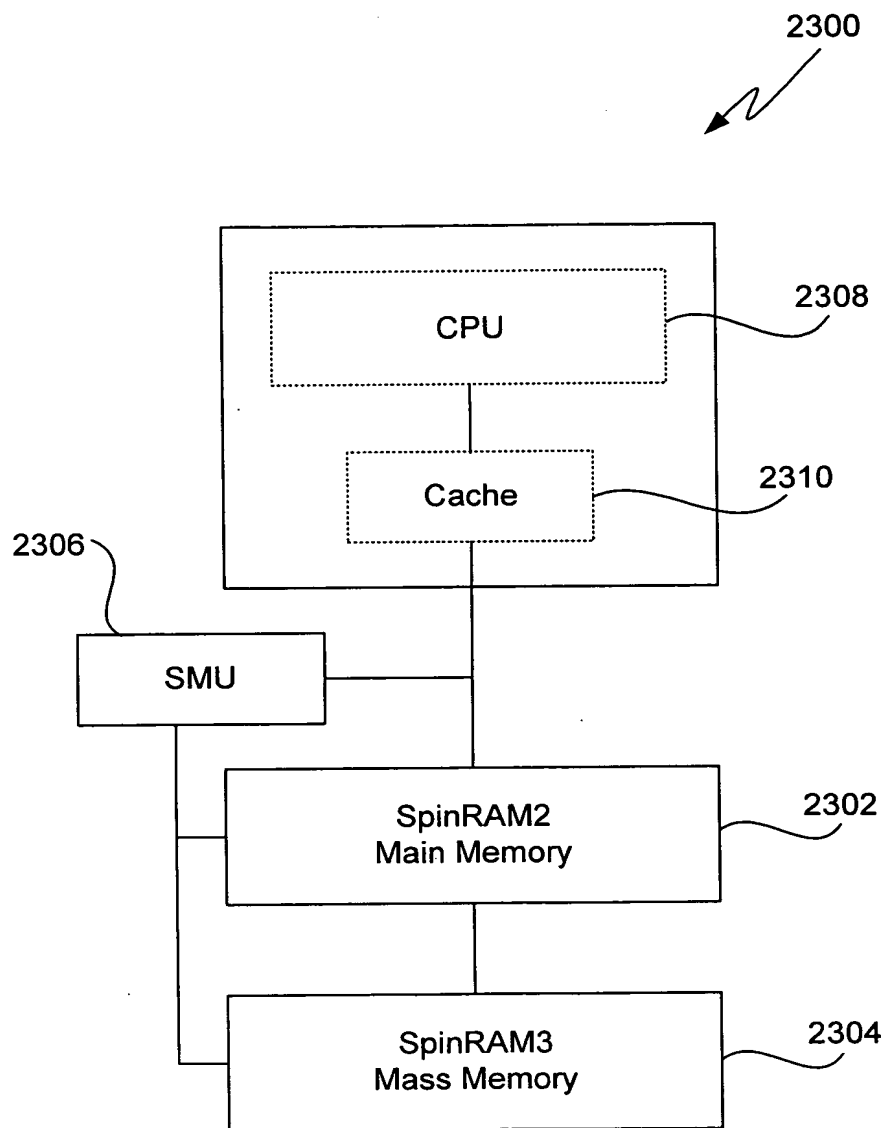


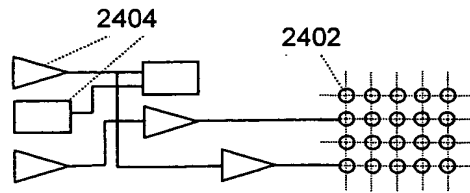
FIG. 22

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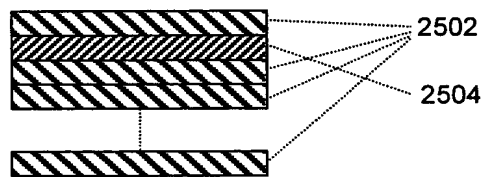


**FIG. 23**

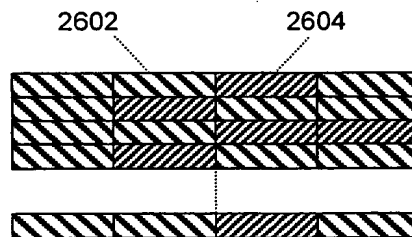
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**FIG. 24**



**FIG. 25**

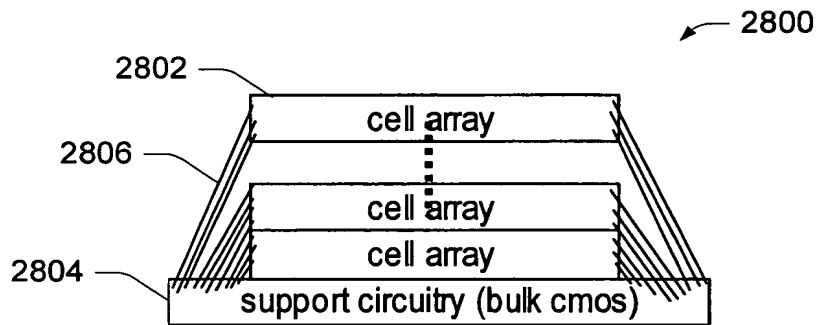


**FIG. 26**

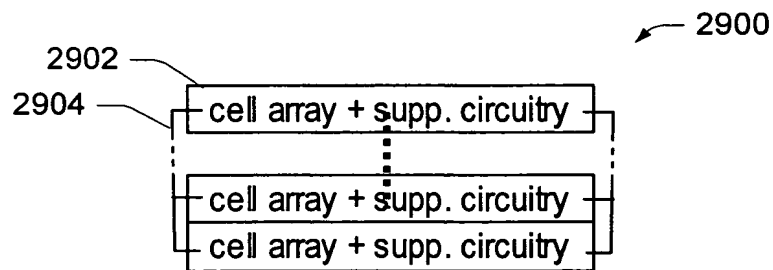
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**FIG. 27**

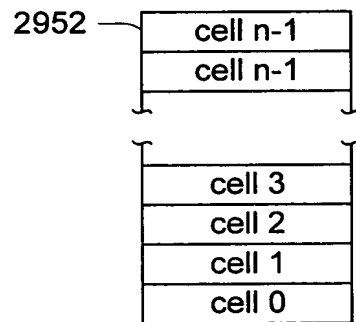


**FIG. 28**

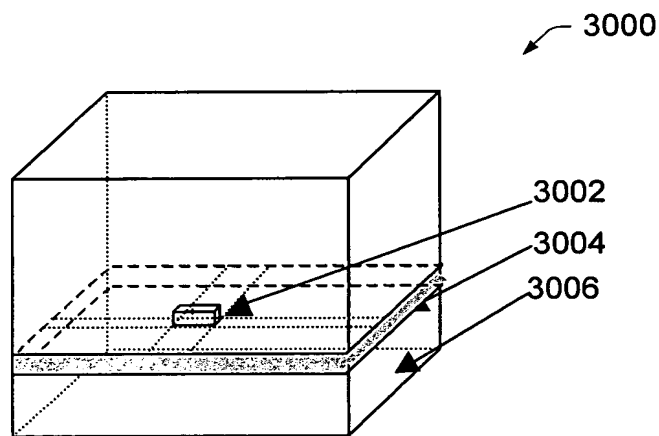


**FIG. 29**

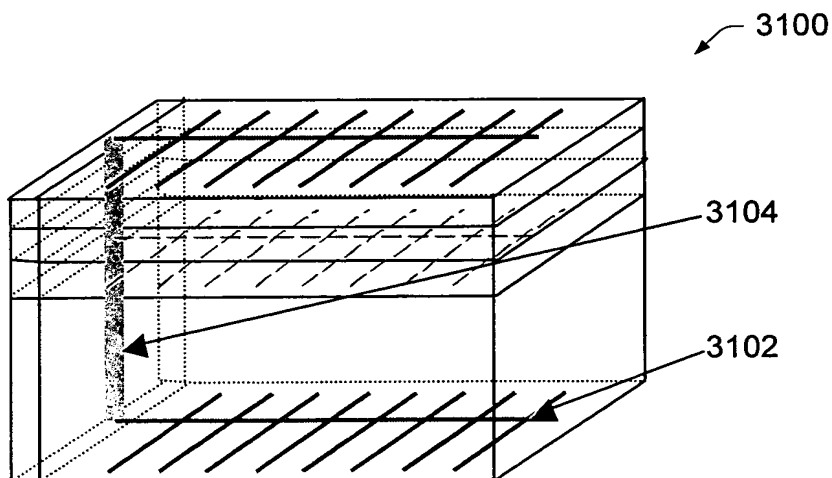
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**FIG. 29A**

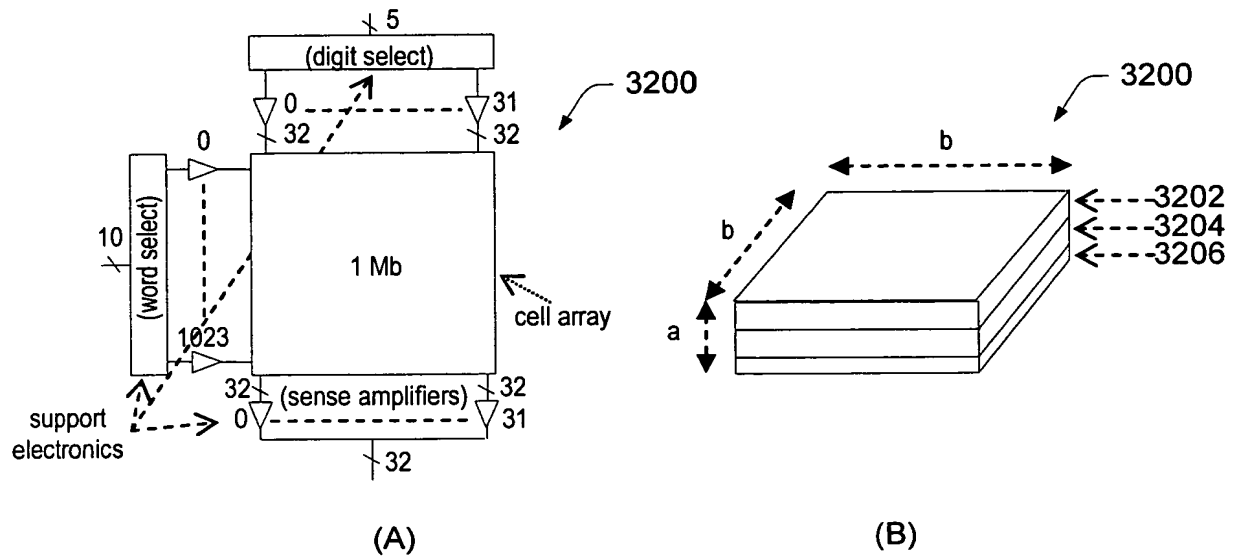


**FIG. 30**

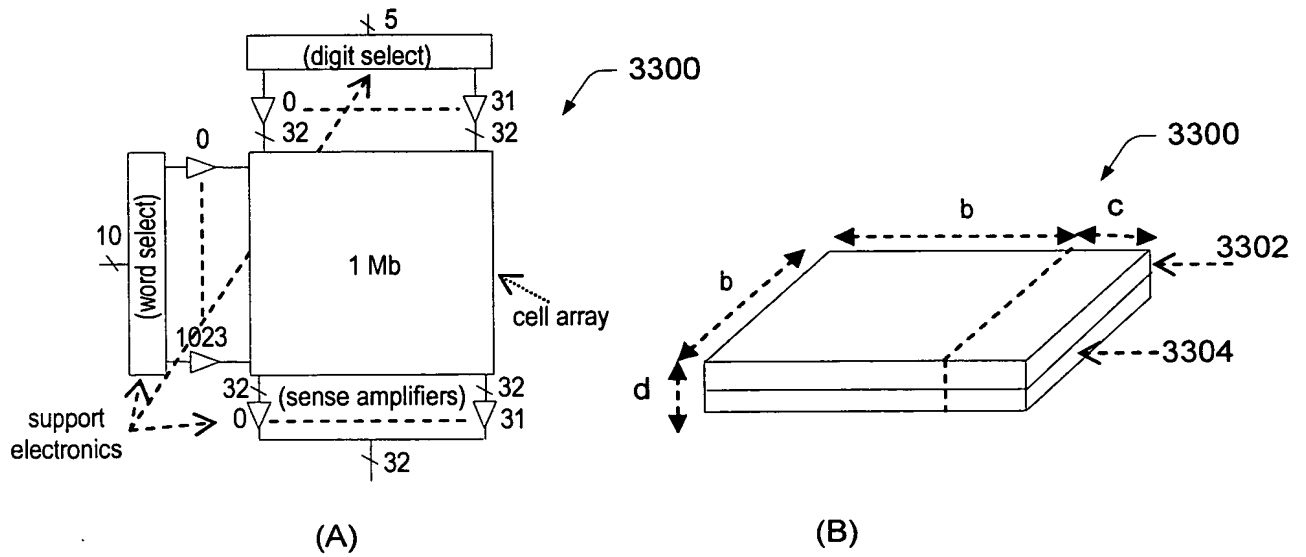


**FIG. 31**

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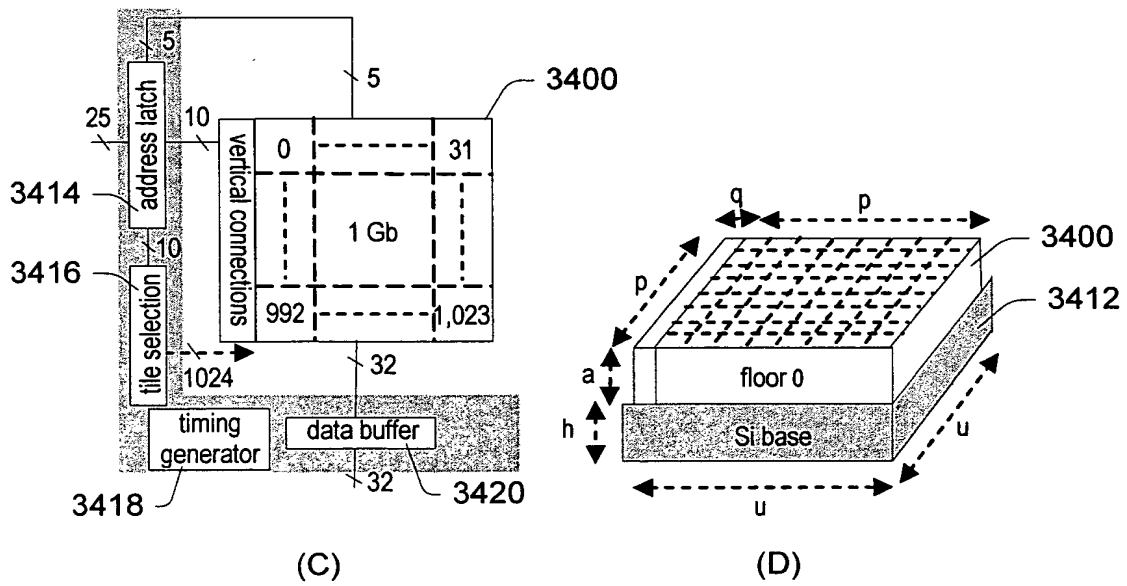
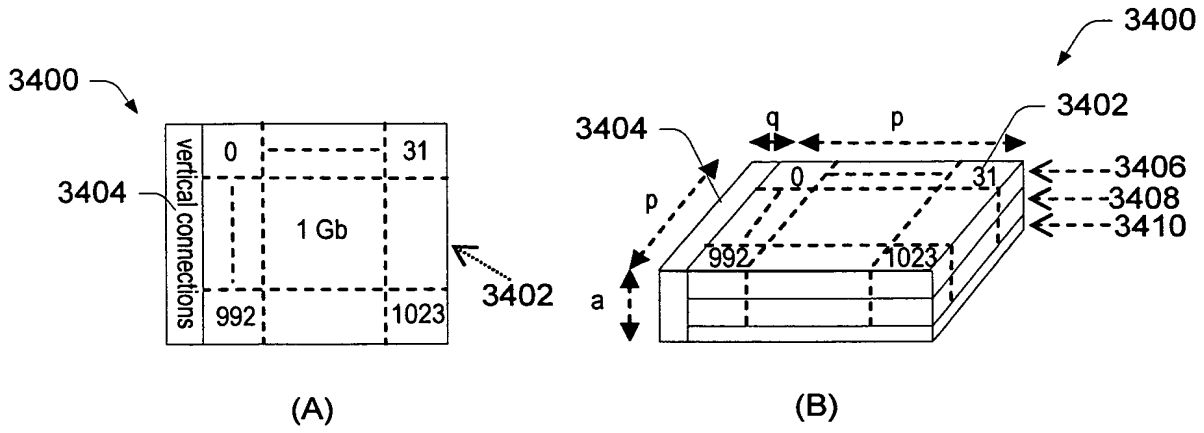


**FIG. 32**



**FIG. 33**

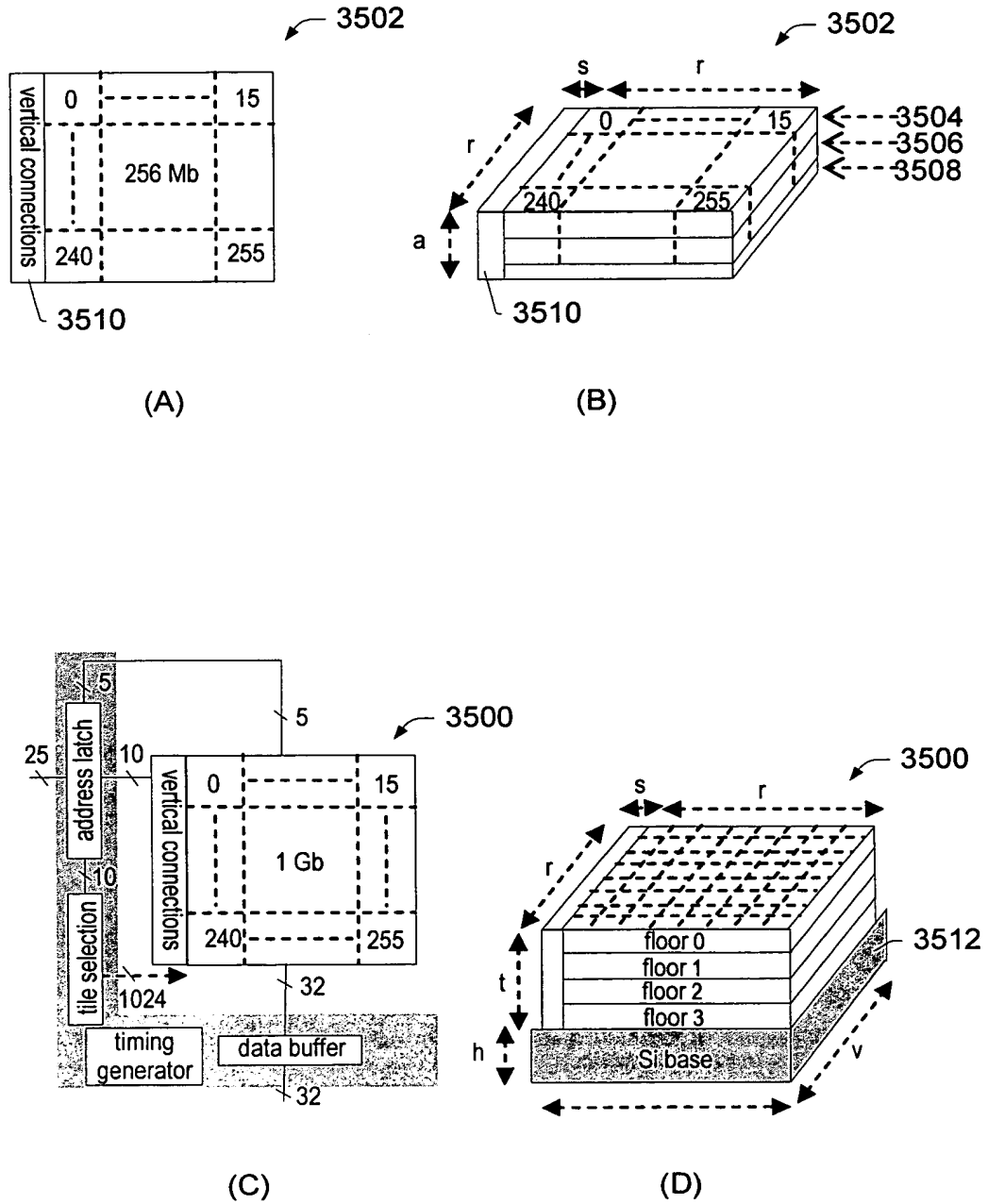
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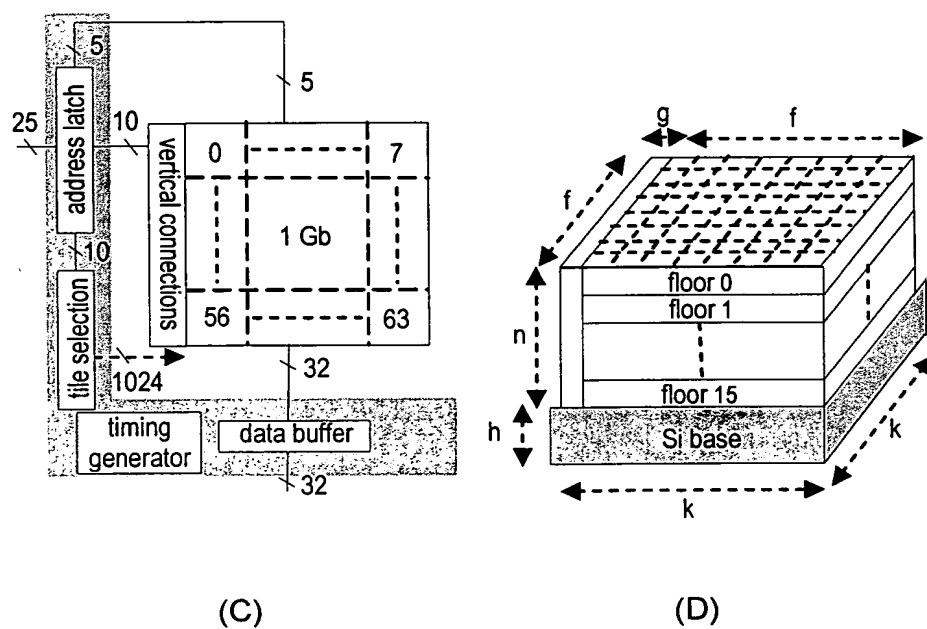
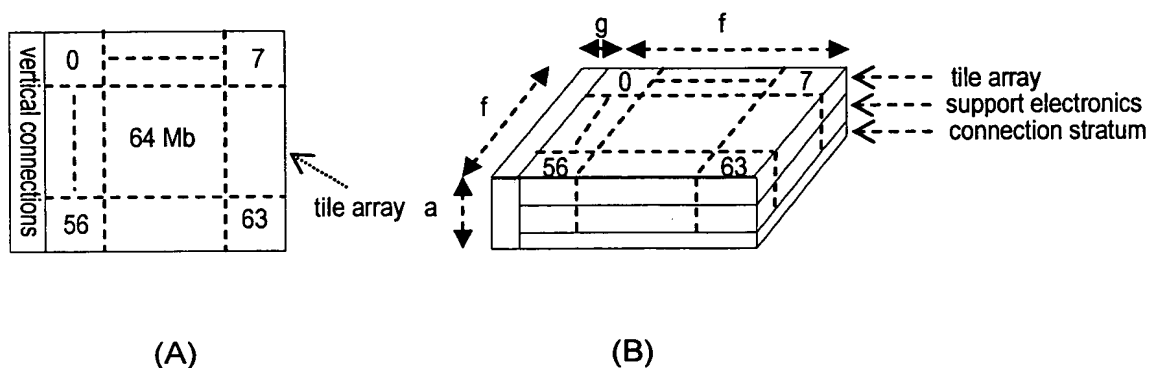
**FIG. 34**



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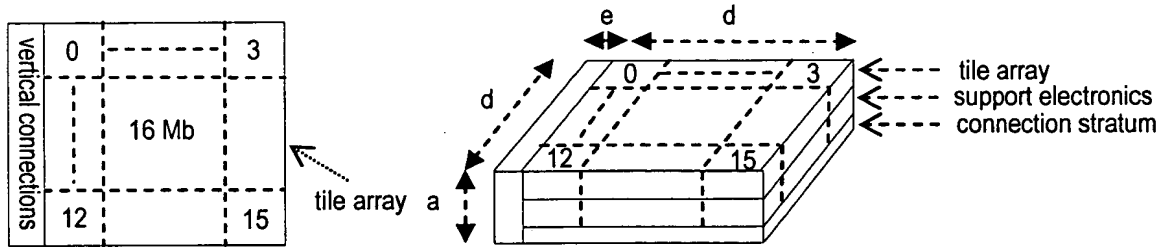


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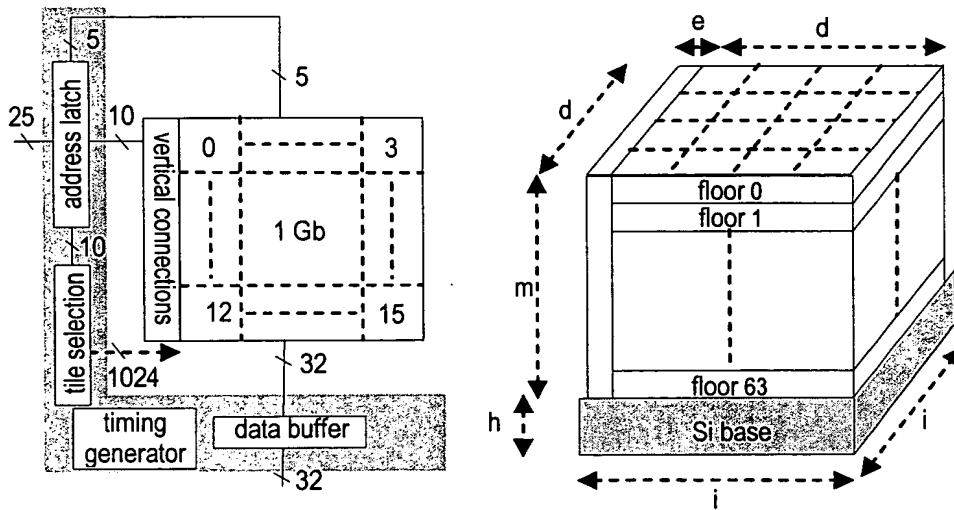
**FIG. 36**

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(C)

(D)

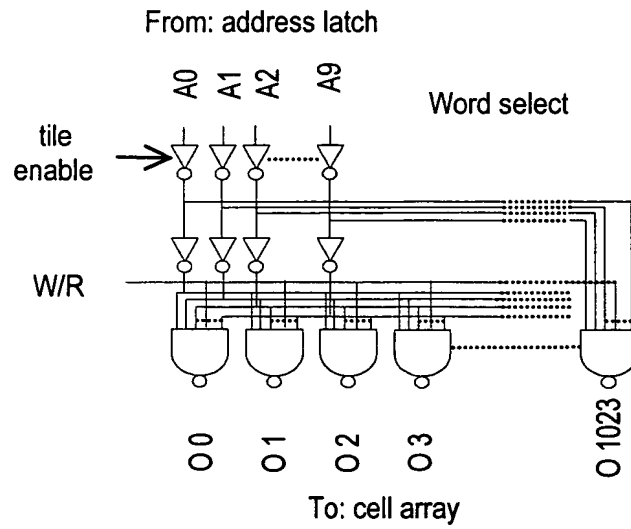


(C)

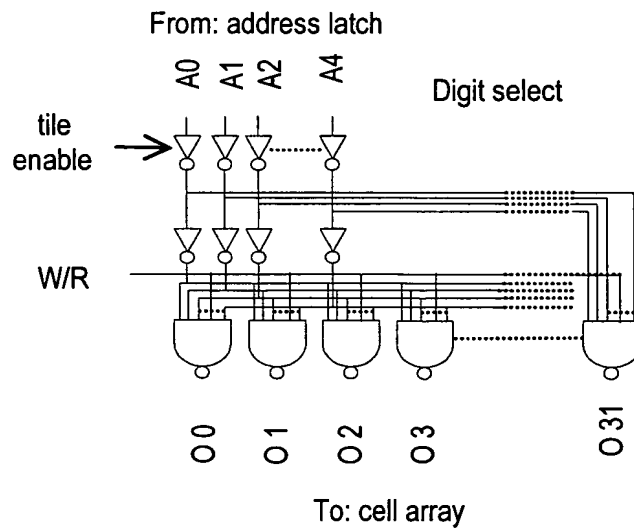
(D)

**FIG. 37**

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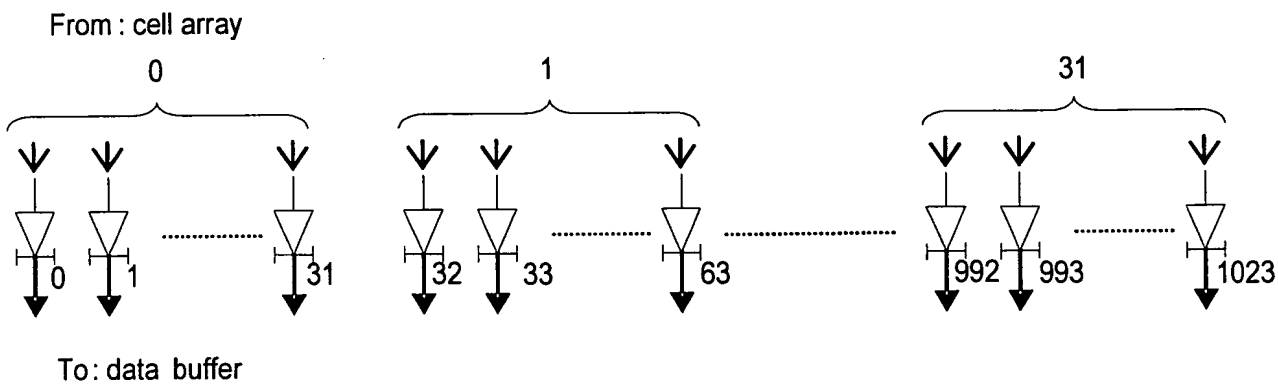
(A)



(B)

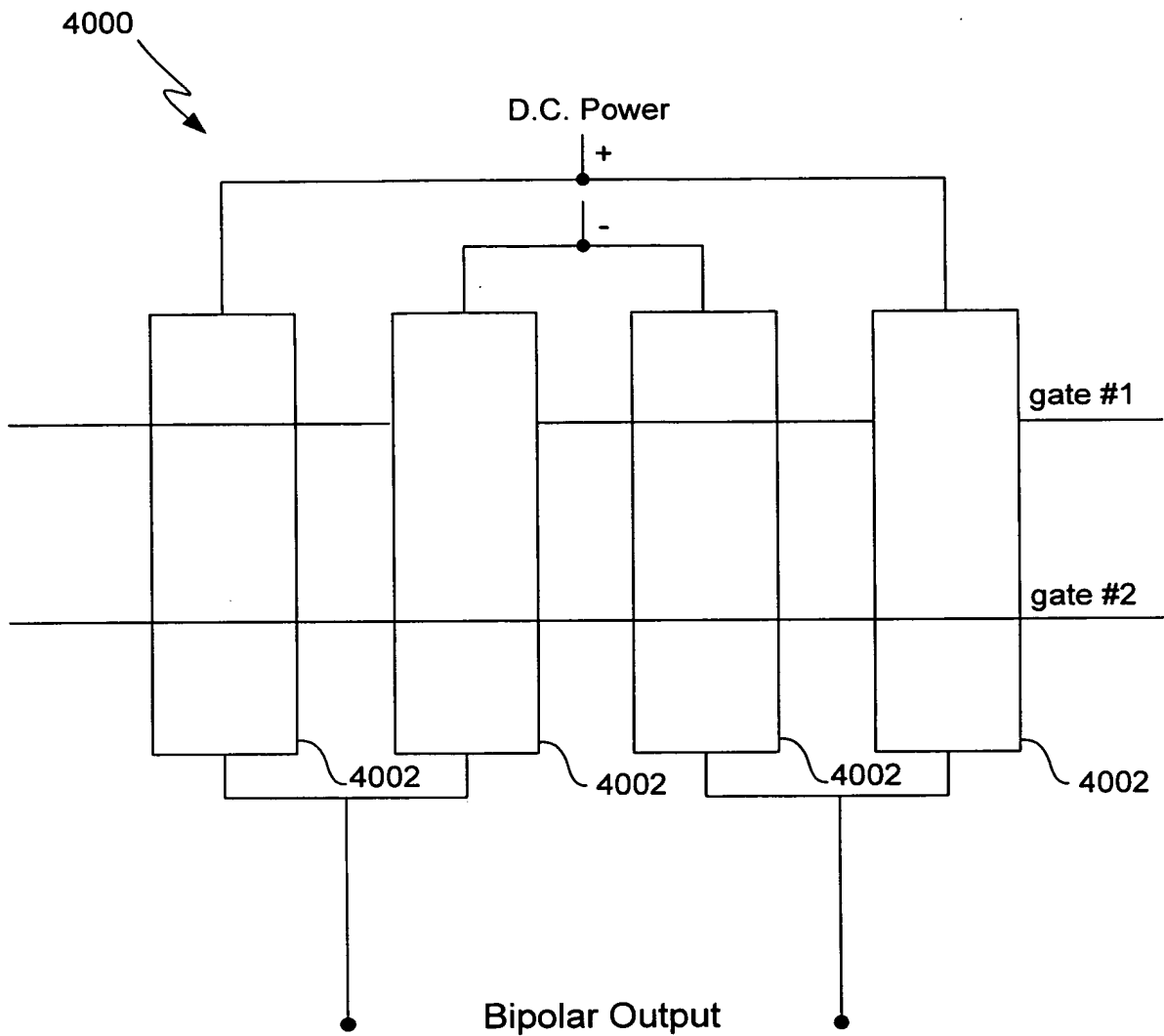
**FIG. 38**

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**FIG. 39**

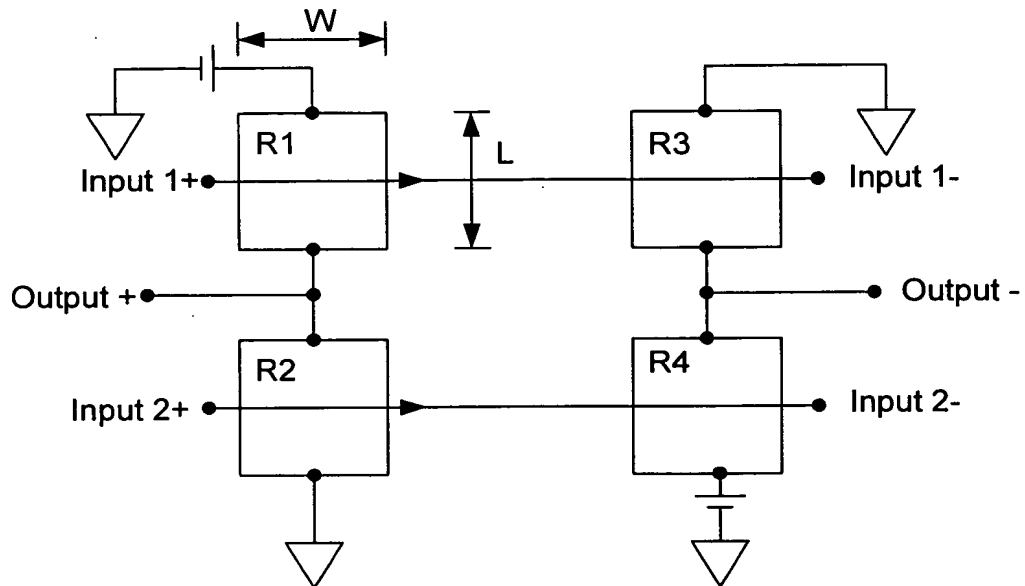
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**FIG. 40**

XOR gate 4100

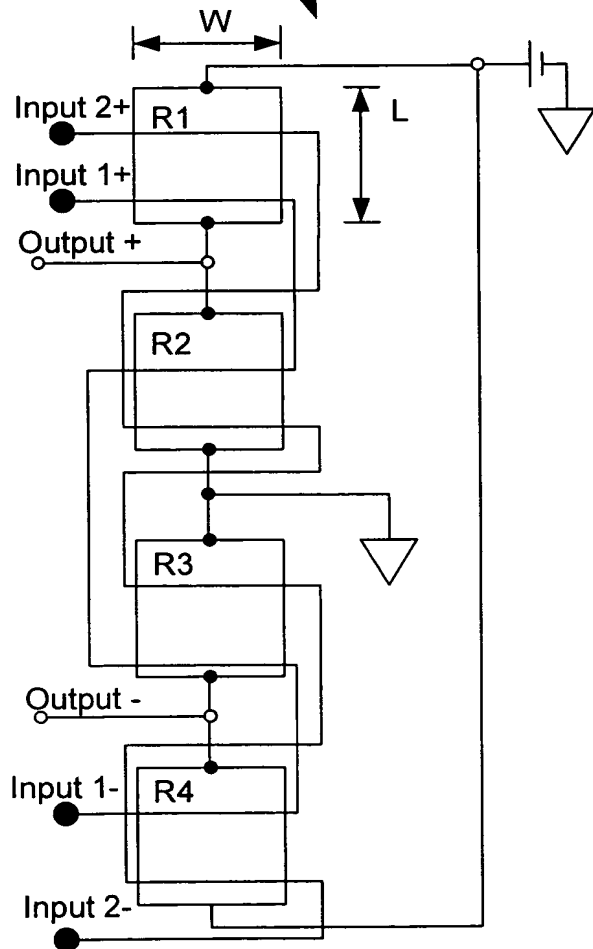
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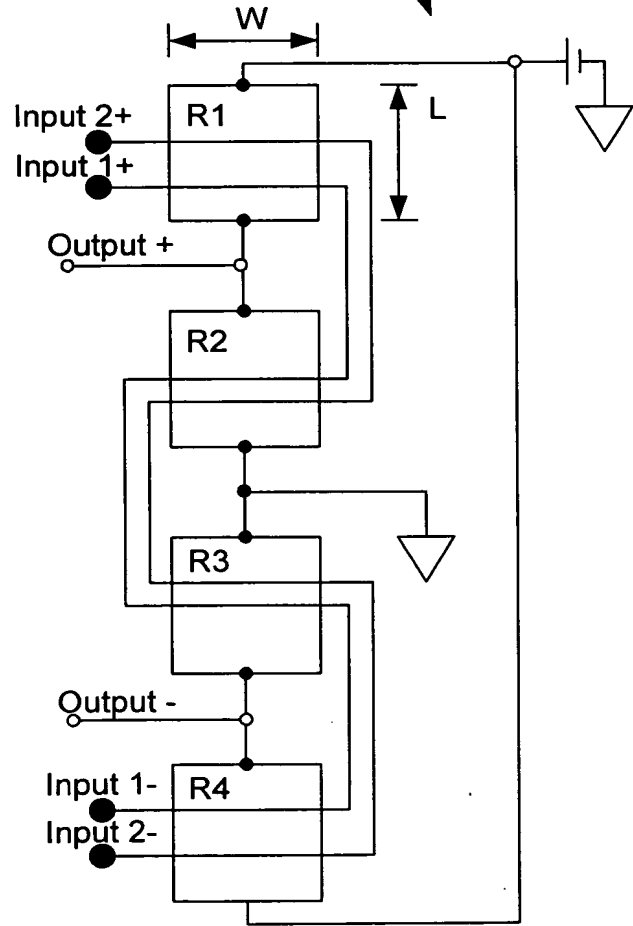
**FIG. 41**

AND gate 4200

OR gate 4250

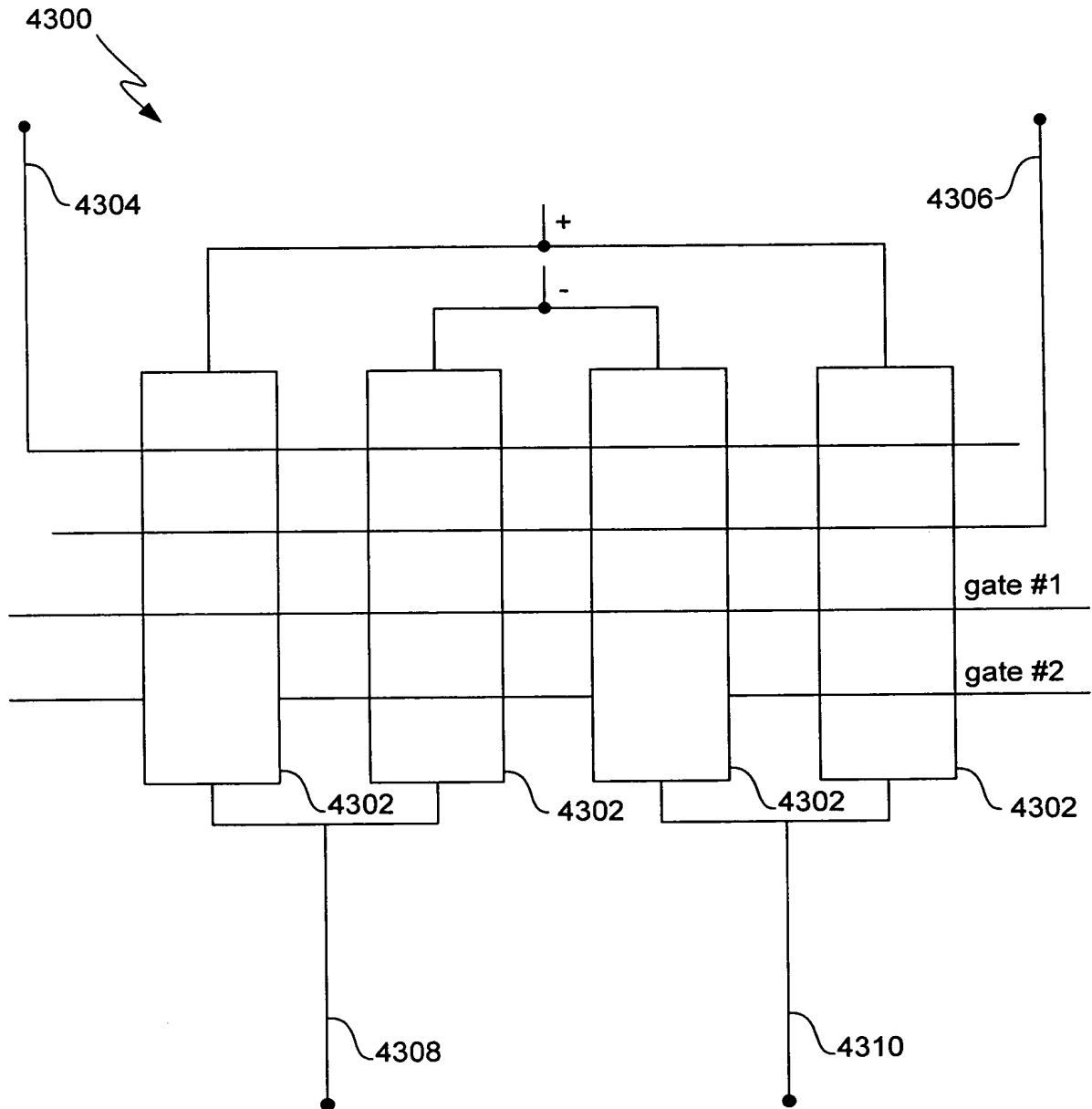


**FIG. 42A**



**FIG. 42B**

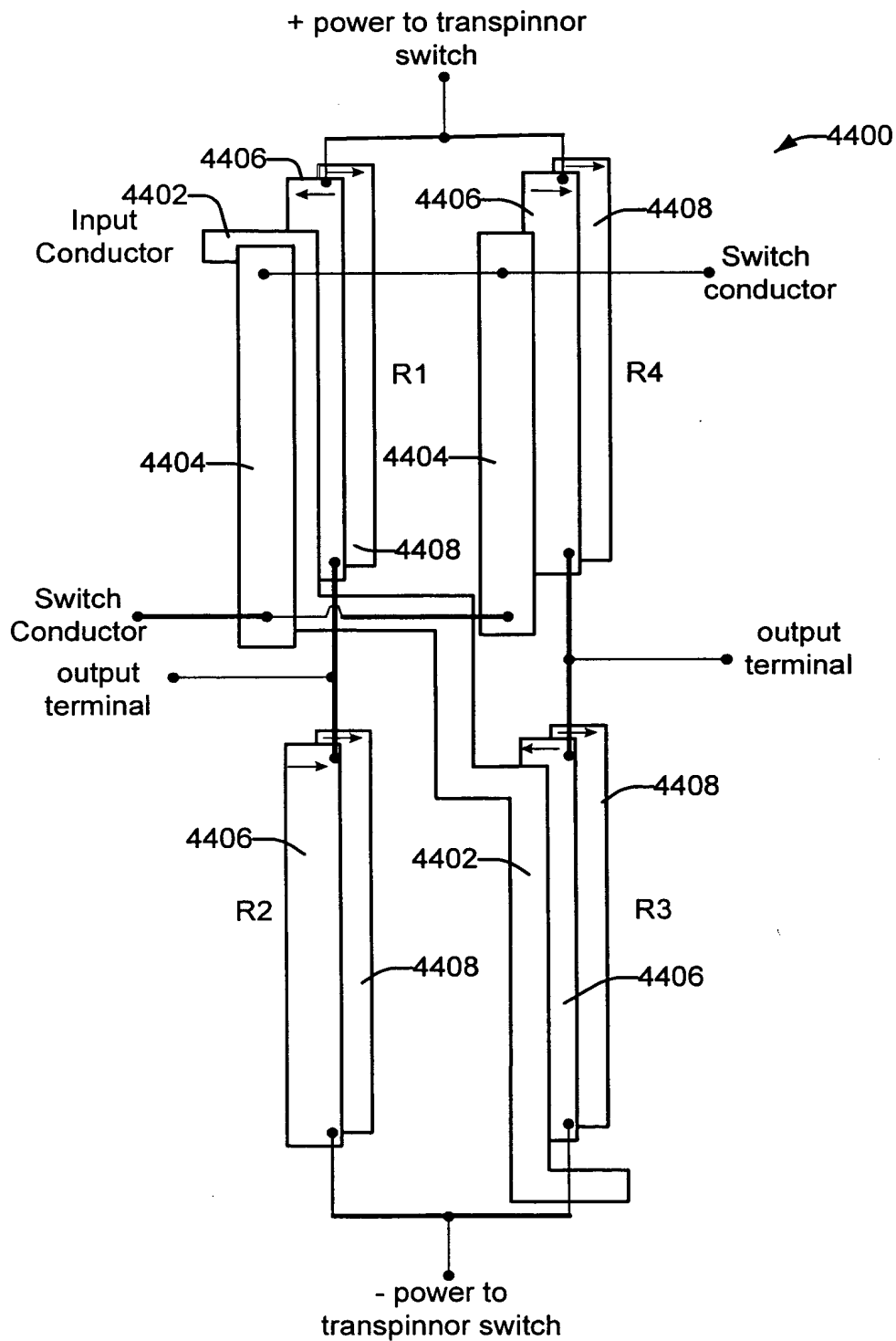
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**FIG. 43**

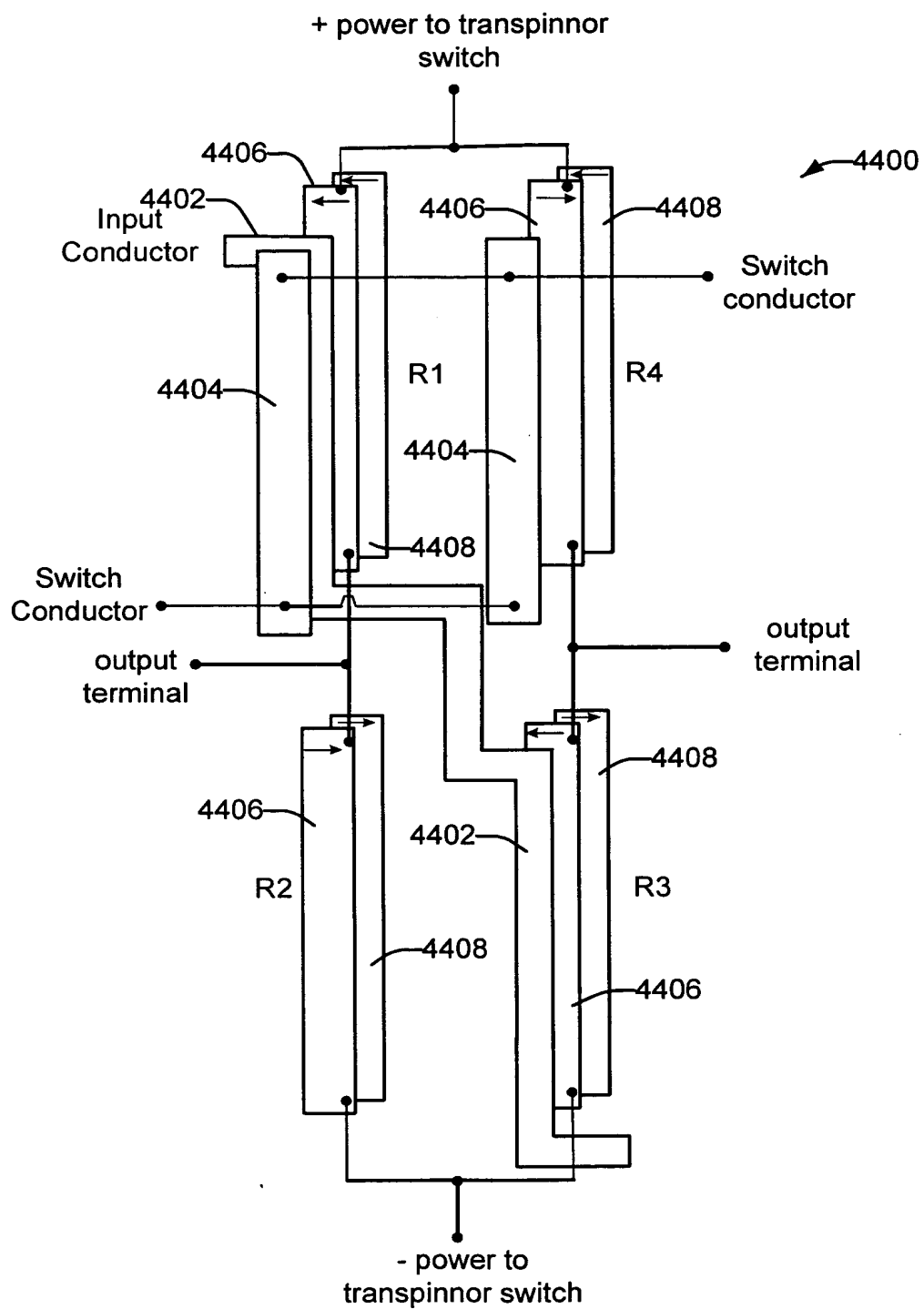


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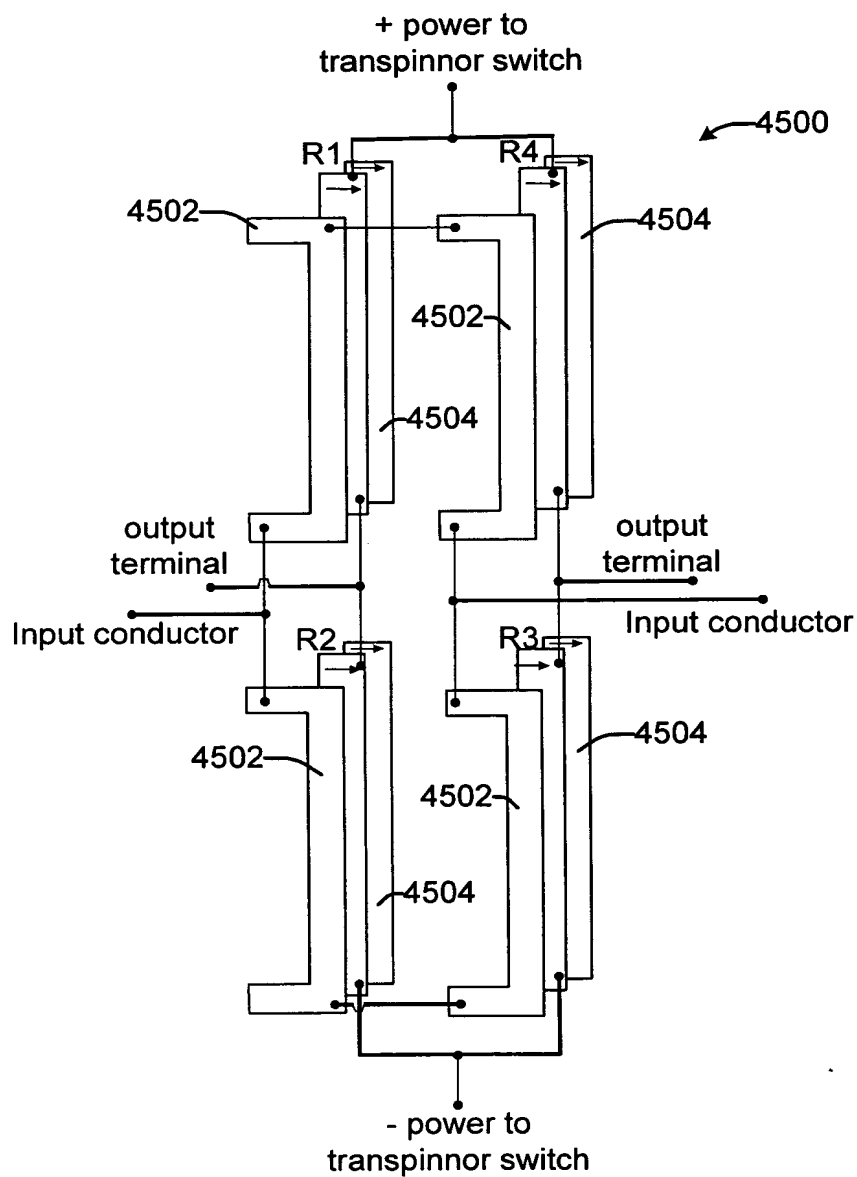
**Fig. 44a**

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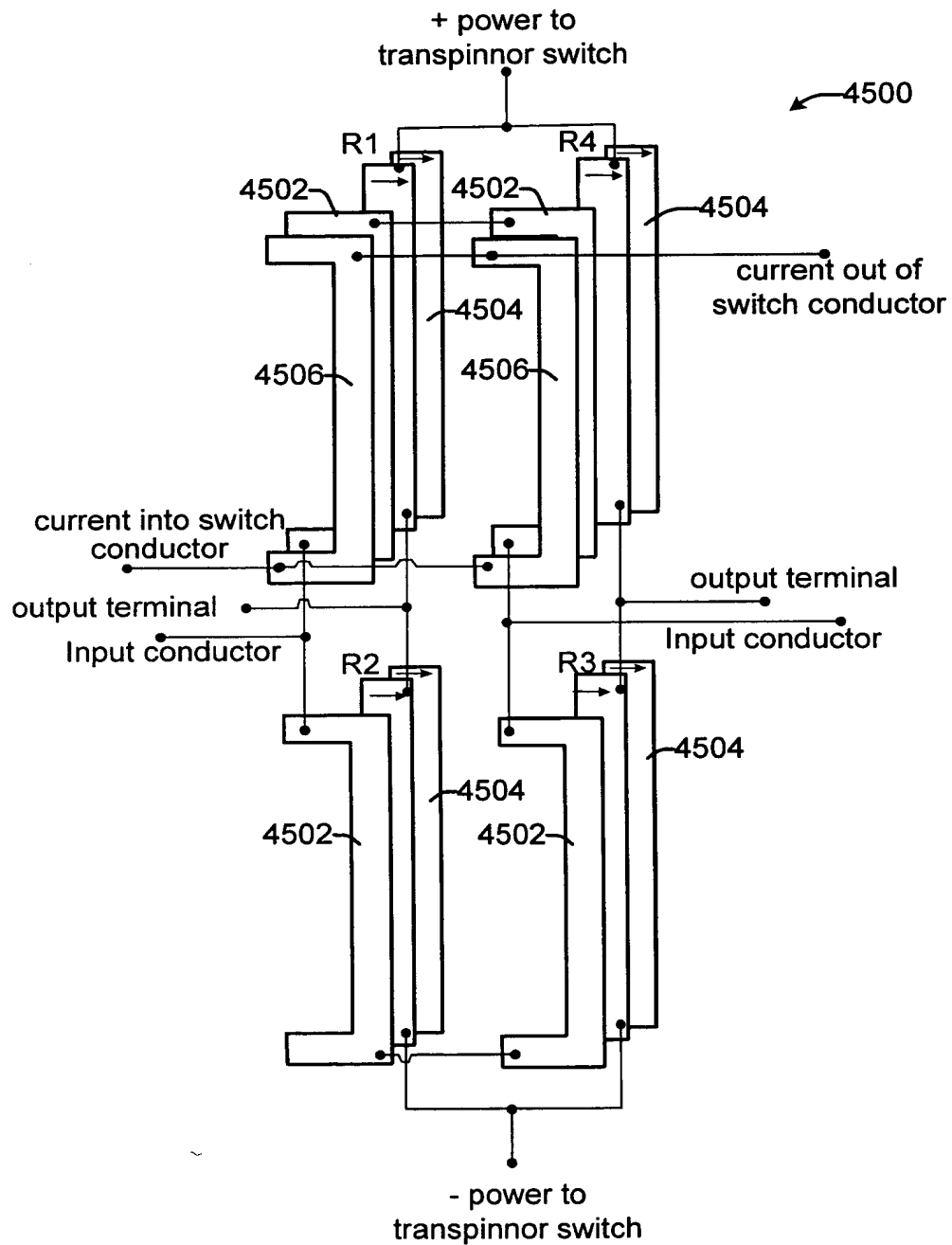
**Fig. 44b**

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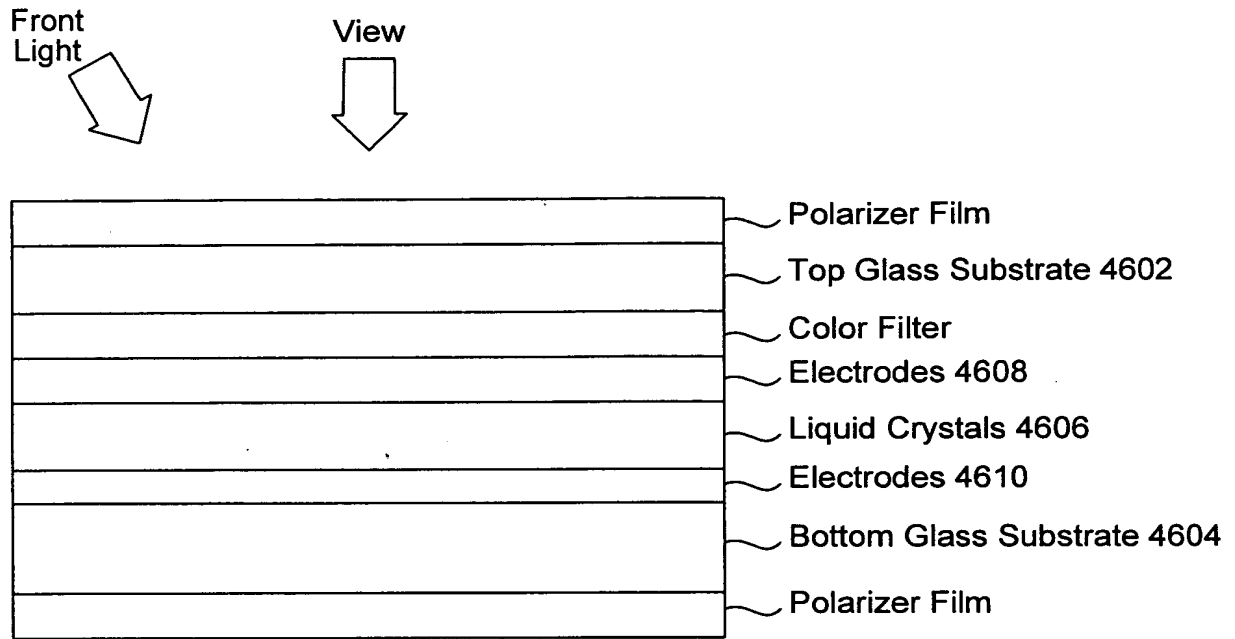
**Fig. 45a**

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**Fig. 45b**

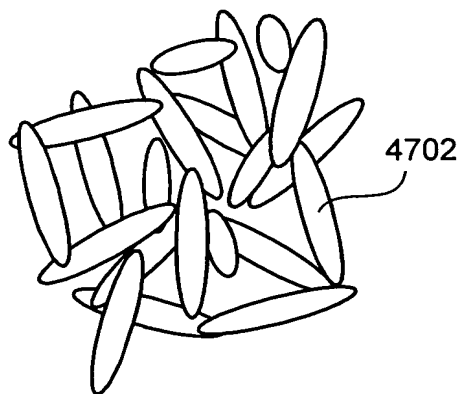
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Cross section of typical LDC.

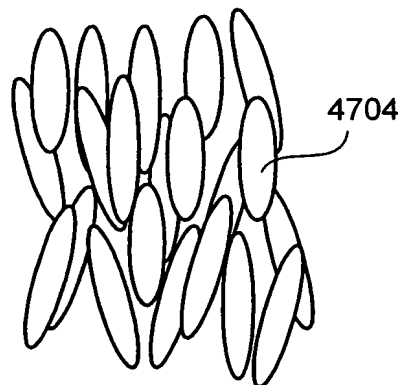
**FIG. 46**

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**Liquid crystal molecules,  
in isotropic phase, with no electric field,**

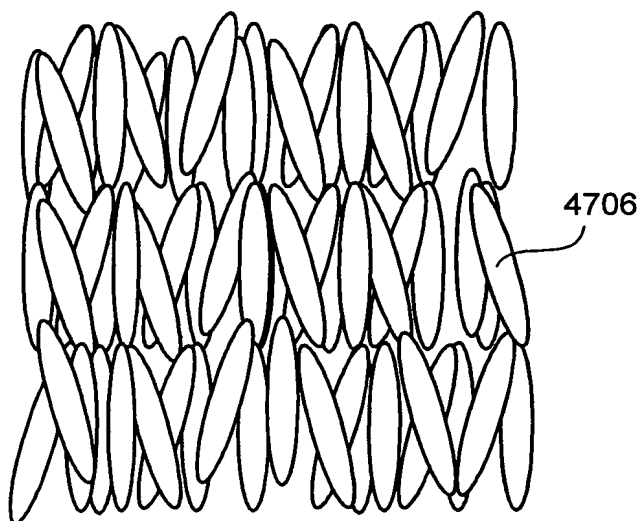
(A)



**Liquid crystal molecules, in  
nematic phase, under applied  
electric field.**

(B)

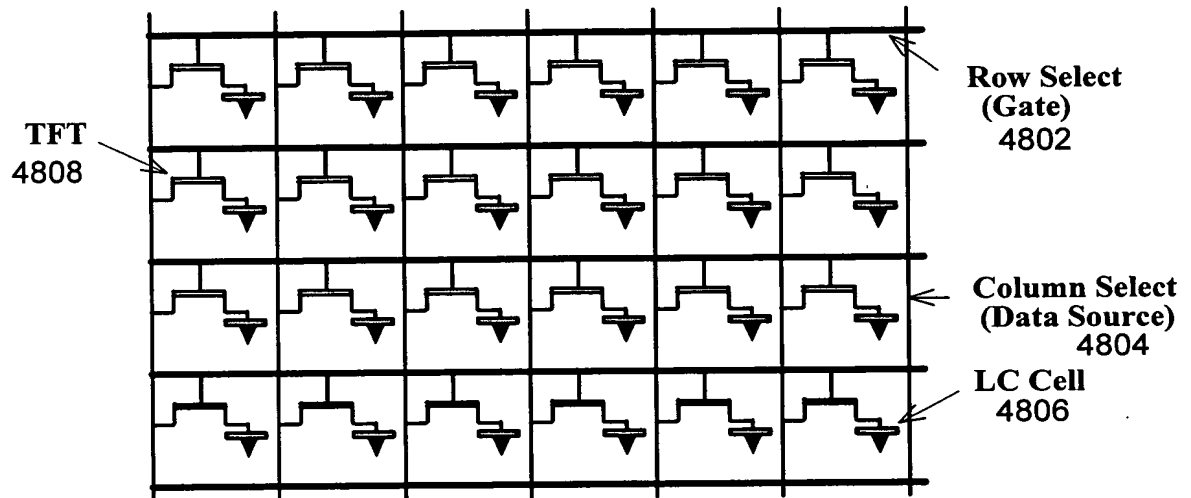
**Liquid crystal molecules in smectic phase, under applied electric field.**



(C)

**FIG. 47**

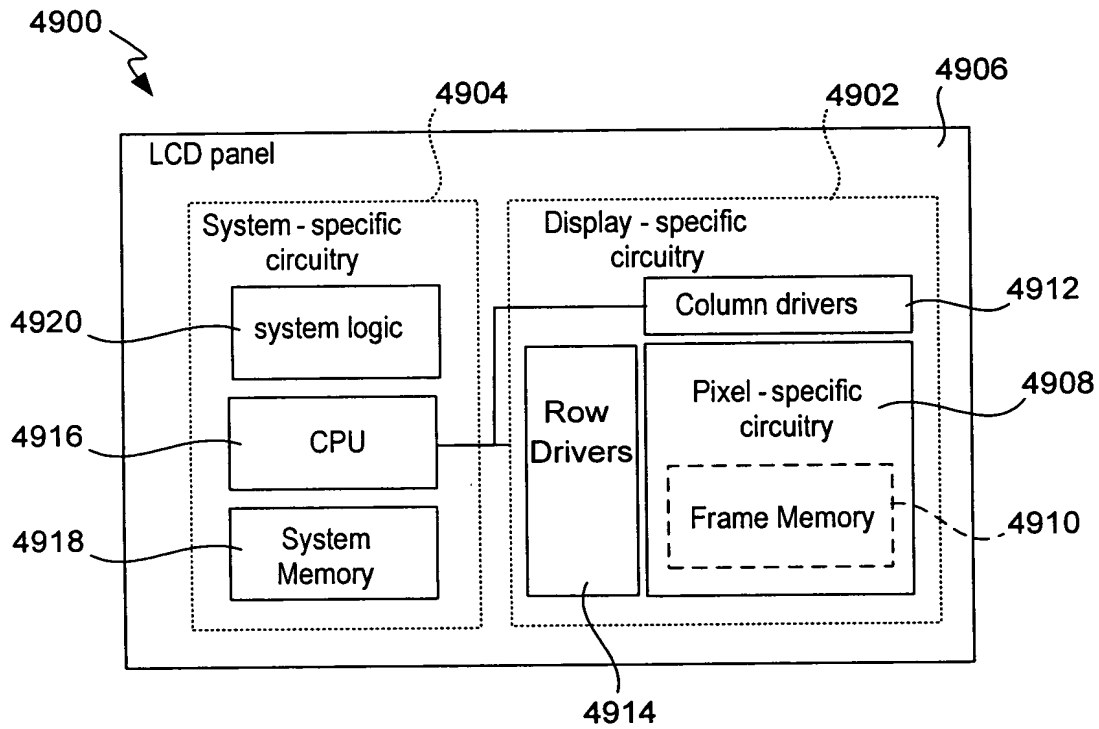
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Schematic of TFT active matrix pixel array

**FIG. 48**

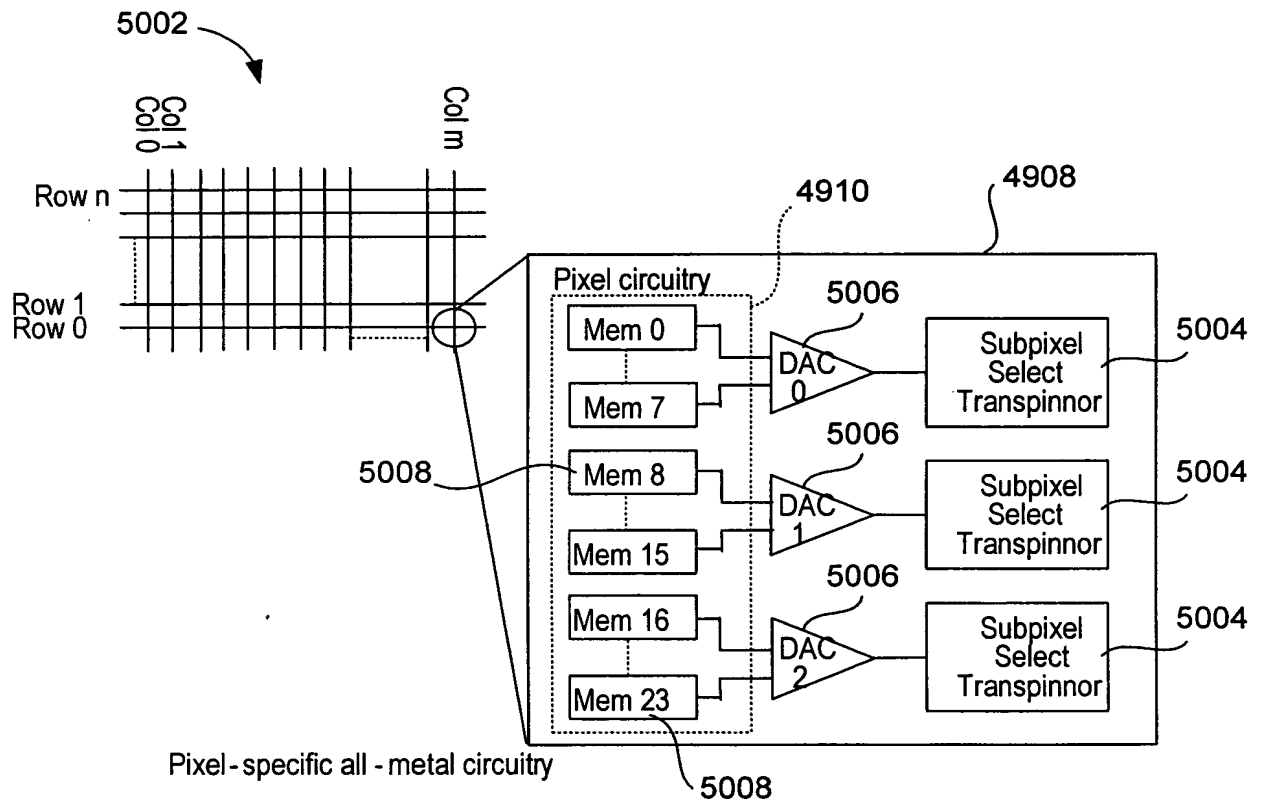
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**FIG. 49**

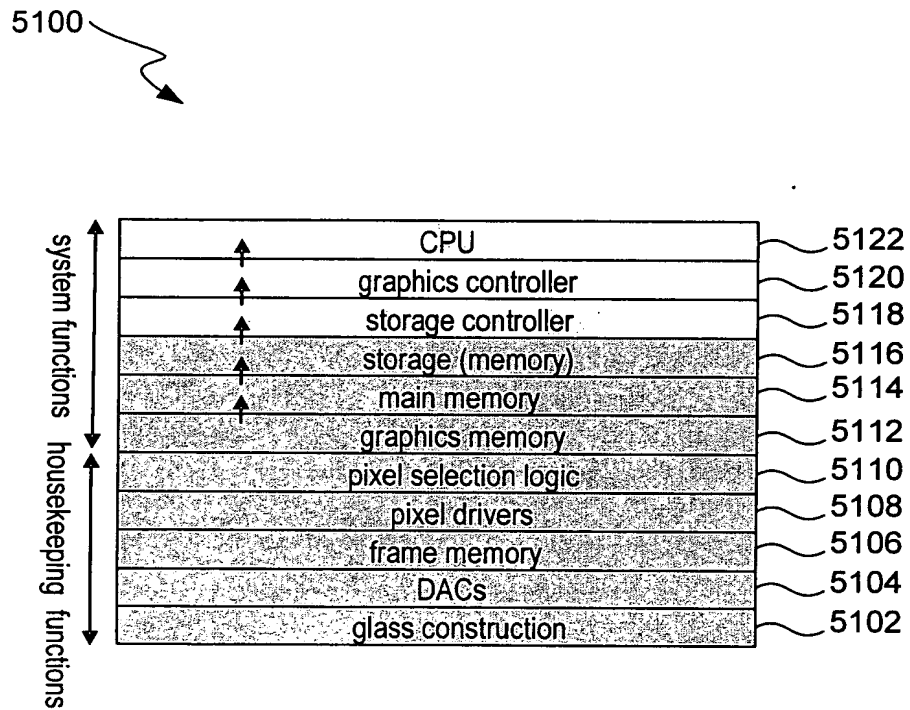


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**FIG. 50**

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**FIG. 51**